

**EFFECTS OF ORGANIZATIONAL BUREAUCRATIC STRUCTURE,
SIZE, MANAGEMENT LEVEL AND AUTHORITARIANISM
ON PERCEIVED NEED SATISFACTION**

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**EFFECTS OF ORGANIZATIONAL BUREAUCRATIC STRUCTURE,
SIZE, MANAGEMENT LEVEL AND AUTHORITARIANISM
ON PERCEIVED NEED SATISFACTION**

A Thesis Submitted
In Partial Fulfilment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

By
RENU RASTOGI

to the

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
INDIAN INSTITUTE OF TECHNOLOGY KANPUR
JULY, 1978

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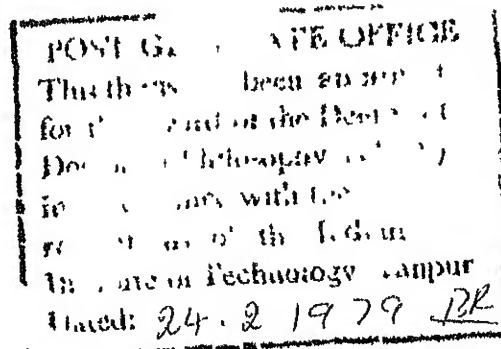
My Parents and Didi

CERTIFICATE

This is to certify that the thesis "Effects of Organizational Bureaucratic Structure, Size, Management Level and Authoritarianism on Perceived Need Satisfaction" submitted by Renu Rastogi to the Indian Institute of Technology, Kanpur in partial fulfilment of the requirements for the degree of Doctor of Philosophy is a record of bonafide research work carried out by her under my supervision and guidance for the last one year and nine months. The results embodied in the thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

Kanpur
July '31, 1978

Janak Pandey
Janak Pandey
Thesis Supervisor.



CERTIFICATE

This is to certify that Renu Rastogi has satisfactorily completed all the course requirements in the Ph.D. program in Psychology. She took the following courses:

H-Psy	777	Elements of Statistical Analysis
H-Psy	778	Experimental Design
H-Psy	780	Psychology of Personality
H-Psy	781	Development of Personality
H-Psy	783	Advanced Experimental Social Psychology
H-Psy	784	Applied Social Psychology
H-Psy	786	Understanding Organizational Behaviour
H-Psy	789	Learning, Memory and Cognition
H-Phi	771	Indian Philosophy II: Philosophy of Liberation and Ways of Growth

Renu Rastogi was admitted to the candidacy of the Ph.D. degree on October 26, 1976 after she successfully completed the written and the oral qualifying examinations.

(K.N. Sharma)
Head
Department of Humanities
and Social Sciences

(M. Mullick)
Convener
Departmental Post-graduate
Committee

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-Ronu Rastogi

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SYNOPSIS

X

Although considerable body of knowledge on organizations exists at the present time, it is particularly fragmented. The main aim of the present endeavor is to study the effects of organizational bureaucracy, size, management level and individual's authoritarianism on perceived need - satisfaction, productivity, quality of work and alienation. Two independent factorial experiments were planned to answer the above question. Experimental manipulations of independent variables were found to be effective. As hypothesized findings of the study clearly demonstrate bureaucratic organizational structure and lower position in organizational hierarchy function negatively in need - satisfaction. Small size organization is perceived to be more conducive for need - satisfaction than large size organization. It is further found that need - satisfaction is partly a function of individual's authoritarianism. Significant interaction effects indicated that need - satisfaction can be appropriately understood when combined effects of different variables are considered. It is argued that bureaucracy in a way does not only hinder satisfaction of needs. Its dysfunctional consequences are bound to show their effects also on organizational performance.

INTRODUCTION

Organizations are a hallmark of modern society. Modern societies produce and distribute goods and services, educate people, provide health care, and so on - by using special - purpose organizations. Through this social invention of modern organizations, people cooperate effectively to get work accomplished. How well these organizations perform their work consequently affects how well societies accomplish their objectives. The social scientists, politicians, social workers, managers and administrators have recognized the importance of scientific and systematic study of organizational functioning to make organizations more effective and useful for the society and for those who work in them (Baumgartel, 1971; Sinha, 1973a; Khan, 1977; Haldipur, 1977; Misra, 1977; Jatti, 1977). Specially, in case of developing nations, it has been suggested that a major task facing these nations is to develop a system which can make the operation of old organizations and newly emerging organizations more and more effective to meet ever-changing demands (Pandey, 1976).

Human beings spend a major amount of their lifetime in different organizations. Etzioni (1961) has remarked that most of our activities take place in one or another kind of organization. The newly - emerging field of organizational behaviour is appropriately described by Ivancevich, Szilagyi, Jr., and Wallace, Jr. (1977) in the following way: "Organizational behaviour is concerned with the

study of the behaviour, attitudes, and performance of workers in an organizational setting; the organization's and informal group's effect on the workers' perceptions, feelings and actions; the environment's effect on the organization and its human resources and goals; and the effect of the workers on the organization and its effectiveness" (P. 3). Cyert and MacCrimmon, Jr. (1968) rightly maintain that an organization is a system having a complex hierarchical structure, that operates in a complex environment with which it constantly interacts. As a social unit, the organization falls somewhere between the primary group and the whole society. The emphasis to view organizations as a distinct field of study is due to the recognized importance of this type of social unit. However, this in no way implies that the processes affecting behaviour in organizations are different than those which have been demonstrated in less complex behaviour settings, including the laboratory (Vroom, 1968). During the past decade and so there has been a tendency for social psychologists to become interested in the systematic study of behaviour in industrial and other types of organizations. According to Vroom (1968) organizations provide social psychologists an opportunity to test basic propositions about the determinants of behaviour in complex environment. In addition, experimental social psychologists equipped in conducting simulation and laboratory studies find insights for their experimental work by observing organizational functioning and in return they provide better understanding of organizational behaviour on the basis of their experimental findings.

Although a considerable body of knowledge on organizations exists at the present time, it is peculiarly fragmented. An empirical systematic knowledge of organizational behaviour in general is limited. Only recently has this field been able to attract psychologists, particularly social psychologists.

Early theories of social organizations either emphasized the role of social structure as the primary determinant of differential human characteristics or placed the locus of the organization within the phenomenal fields of its individual incumbents (Lichtman & Hunt, 1971). Many modern organizational theories objected to the one-sidedness of these two earlier approaches and accepted the value of each with an attempt to integrate them into a unitary systematic conceptual scheme. For example, Scott (1961) proposes that organizational behaviour can be understood in terms of three elements: (1) The stated design of functions, i.e., the requirements of the organization; (2) The characteristics of people who populate the organization; (3) The relations between the organization's defined properties and the characteristics of people who populate it. The main aim of the present endeavour is to study bureaucratic organizational structure (a characteristic of the first element) and authoritarian personality as a characteristic of the second element. In addition to these two, other independent variables included in the study are status hierarchy and size of the organization. The major objective of this study is to determine the effects of the above-mentioned independent variables on perceived needs satisfaction, productivity, quality of work and alienation.

Independent Variables

Bureaucratic Organizational Structure: The preponderance of evidence shows that bureaucratic and feudal structures are the dominant organizational forms in our society (Sinha, 1973a, 1973b; Misra, 1977; Sinha & Sinha, 1977). However, there is a lack of empirical and scientific studies, specially by psychologists to demonstrate the way in which bureaucratic organizational structure influences the individuals who work under it. In India, some attempts have been made to study bureaucracy by sociologists, historians, political scientists and public administration experts (Aiyer, 1960; Appleby, 1956; Prasad, 1974; Misra, 1977; Singh, 1974). These investigators, however, have not studied the influence of bureaucratic structures on the individual's growth and, particularly, his need satisfaction.

The evolution of modern bureaucracy is largely based on the desire to "control" other human beings (Thompson, 1961, 1974). In one way control may be seen in Indian society as a personal, family affair. The father is dominant, and owns the property. He tells other family members what to do. Thompson (1974) suggests that this arrangement may have started with the help of brute force but was eventually institutionalized. Control evolved as organizations got bigger and included non-family members. As organizations acquired more intricate goals and had to adapt to a faster and faster pace of change, people and their organizations changed together towards the evolution of more and more control. This evolution of control was the basis of Max Weber's (1964) theory of

the development of modern bureaucracy. Commenting on evolution of bureaucracy Misra (1977) maintains "Originating from the institution of absolutism, bureaucracy found, in the Industrial Revolution of the eighteenth century, a suitable incentive for growth and, in the subsequent progress of the capitalist economy, its opportunity to attain maturity"(p. 2).

The term "bureaucracy" is of recent origin. In the eighteenth century the French word "Bureau" meaning writing table or desk came to be linked with a suffix signifying rule of government. Some of the larger units in government have been called "bureaus", and so the kind of organization resulting from this process has been called "bureaucracy". During the nineteenth century the pejorative use of the term "bureaucracy" spread to many European countries, where this term was used to decry the tortuous procedures, narrow outlook, and highhanded manner of autocratic government officials (Heinzen, 1845). However, this popular, pejorative usage must be distinguished from "bureaucracy" used in a technical sense in social sciences. Social scientists have employed the term because it points to the special, modern variant of age-old problems of administration. Max Weber's macroscopic level definition of bureaucracy has been presented by Bendix (1968) in the following words: "... bureaucracy establishes a relation between legally instated authorities and their subordinate officials which is characterized by defined rights and duties, prescribed in written regulation; authority relations between positions, which are ordered systematically; appointment and promotion based on contractual agreements

and regulated accordingly; technical training or experience as a formal condition of employment; fixed monetary salaries; a strict separation of office and incumbent in the sense that the official does not own the "means of administration" and cannot appropriate the position; and administrative work as full-time occupation" (p. 206). Obviously, Weber's views diverge sharply from the popular stereotypes which see bureaucracy as synonymous with governmental inefficiency.

In the developmental analysis of bureaucracy, Weber (1947) classified and described organizations according to the kind of control they had. First were patrimonial organizations, based on interpersonal obligations, such as we find in families and later on in feudalism. This control evolves into almost pure tradition, or custom, in the post-feudal monarchical period. Finally, in the modern period, the need for constant calculation and decision making results in a kind of organization based on an acceptance of a rationalized system of operations. Weber (1947) called such control "legal rational" and such an organization a "bureaucracy".

According to Weber (1947) bureaucracy is governed by six principles which are: (1) fixed and official jurisdiction areas, (2) firmly ordered hierarchy, (3) management of office by written documents and a filing system, (4) specialized position with specialized training, (5) full-time official positions and (6) relevant learning and expertise based on relevant academic disciplines. The official enjoys a social esteem in accordance with his rank in the hierarchy.

The Weberian concept of bureaucracy has attracted the attention of many. The central theme of the criticism is its neglect of the informal aspects of human relationships and over emphasis on the formal structure within an organization. Merton (1940, 1957) pointed out that Weber's theory completely neglected the internal stresses and strains which are the results of bureaucratic structure. He gave arguments to show how bureaucratic structural arrangements and behavioural requirements produce unintended negative consequences on the individuals. Selznick (1943, 1961) further extended Merton's analysis of bureaucratic dysfunctions and presented the resistance of individuals to conform to the mechanistic model of organization. Selznick (1943) argues for the crucial role of participation within an organization for reinforcing, moulding and modifying the existing power relationship within it.

Gouldner (1954, 1955) identifies some of the variables relating to bureaucratization in an effort to provide answers to some questions left unanswered in the Weberian analysis of bureaucracy. He sets out to examine the nature and functions of rules and how they vary from one circumstance to another, and realizes that Weber's hypothesis regarding effectiveness of bureaucracy, based on uniform and rigid rules with little scope for variability, may not be the best thing to look for. Gouldner (1954) argues that rigid organizational structure may cause conflict and tension and consequently may decrease productivity. Another eminent sociologist Blau (1955) suggests that certain external and internal factors

force a bureaucracy to make modifications in its structure and permit the perpetuation of certain informal norms. Rules and procedures, at least most of them, can encourage the achievement of organizational objectives and at the same time produce dysfunctions which may interfere with the organizations' capacity to undertake changes to continue functioning. Blau (1955) also challenges the myth implied in the Weberian concept of bureaucracy that rationality only comes from the top. He writes: "maximum rationality in the organization, therefore, depends on the ability of the operating official to assume the initiative in establishing informal relations and instituting unofficial practices that eliminate operational difficulties as they occur" (Blau, 1955, p. 206).

Crozier (1964) considers bureaucracy as a part of the social system which consists of a distinctive culture and a system of shared values. Crozier (1964) agrees with Weber's analysis that bureaucracy is inevitable in today's complex and fast-changing world, but at the same time he emphasizes the dysfunctional consequences of a typical bureaucratic organization, which Weber ignored, and goes one step ahead of many of his predecessors by suggesting how changes take place in it. He has tried to clarify some of the complex and often confused relationships between culture, value, and the bureaucratic system.

The "rosy" picture that Weber had painted about bureaucracy has been also examined by psychologists. For example, on the basis of evidences, Argyris (1957) has argued that the basic impact of formal organizational structure is to make the employees feel

dependent, submissive, and passive and to require them to utilize only a few of their less important abilities. More recently, Ivancevich, Szilagyi, Jr., and Wallace, Jr. (1977a, 1977b) have examined the concept of organizational structure and process components of communication, decision making, performance evaluation, and reward systems. The effects of these components determine to a considerable degree the behaviour of individuals in organizations. Similarly, Steers (1977) recognizes the importance of structure and suggests that structure refers to the manner in which an organization organizes its human resources for goal-directed activities. He further shows how the human parts of an organization are fitted into relatively fixed relationships that largely define patterns of interaction, coordination, and task-oriented behaviour. For Steers (1977) examples of structural variables include such factors as span of control, relative decentralization or centralization of authority and power, the degree of formalization, the amount of functional specialization, and so forth.

A group of investigators (Pugh, Hickson, Hinings, & Turner, 1968, 1969; Pugh, Hickson, & Hinings, 1969) employed a multivariate approach to study organizational characteristics. Structural concepts drawn chiefly from the theory of bureaucracy, but also from management writings, were conceptualized as a means of characterizing the administrative structures of organizations. These investigators found five structural variables: specialization, standardization, formalization, centralization, and configuration. Miner and his associates (Miner, 1971; Miner, Harlow, Rizzo, & Hill,

1974) have studied bureaucratic structures. They have specially studied the hypothesis that the role motivation theory (McClelland & Winter, 1969; Minor, 1965) of managerial effectiveness is applicable in highly structured organizational contexts of the bureaucratic type, but not applicable in low structure contexts of the professional type. Simulated organizations with student members were used in the study. The results generally support the hypothesis, with managerial motivation being significantly related to promotion decisions in the high structure situation, but not in the low structure situation.

Recently Schein and Greiner (1977) have argued that bureaucratic organizational structure is like a mechanical model with no concern for individual behaviour. Individuals in such organizations are concerned with lots of rules which describe the tasks to be executed and their manner of performance. Each of them is supposed to channelize his energy to accomplish the goals assigned to everyone. Rational conduct of the individual depends on the information available to him. His motivation and expectations are secondary to rational conduct. The literature review is quite indicative of the importance of studying consequences of bureaucratic organizational structure on individuals' satisfaction and other behavioural diseases. It seems important to explore more systematically the way individuals perceive bureaucratic organizational structure for their need satisfaction, productivity, alienation and job satisfaction.

Organization Size: A major principle underlying the development and elaboration of organizational structure is the maximization principle (Katz & Kahn, 1966). The maximization principle suggests that organizations, in their attempt to control their environment, will move toward growth and expansion by adding new functions and substructures. The theory further postulates that elaboration of function and structure results in a more bureaucratic set-up with increased specialization, formalization, standardization, and the addition of subsystems for coordination, control and regulation (Katz & Kahn, 1966). Empirical and rational support to these hypotheses have been provided by Blau (1970). He proposed that increased organizational size generated greater structural differentiation. Increased differentiation led to increased problems concerning coordination, communication, and control as a function of increased social complexity. This in turn further required a larger administrative component to provide expert knowledge to handle the problem of increased complexity. In sum, Blau (1970) argues that as size increases, its marginal influence on structural differentiation decreases, and the problems associated with increased differentiation lead to resistance to further differentiation. On a somewhat similar line, Gouldner (1954) viewed increased size and bureaucracy as leading to greater needs for control which resulted in the implementation of general and impersonal rules. Earlier, Merton (1940) saw standardization of procedures as a result of increased emphasis on reliability. Thus, the above descriptions plot a course of organizational development from a small primitive system to a large scale bureaucracy.

Katzell (1962) in his analysis of contrasting systems of work organization has argued that many factors must be taken into account before it can be decided what organizational policies and practices are likely to work best. The first parameter mentioned by Katzell is size, or the number of interdependent organizational members. Hickson, Pugh, and Pheysey (1969) have also given prominence to size factor in their analyses of determinants of structure. Indik (1963) reviewed the literature relating organizational size to member participation in terms of absence and turnover. In another paper, Indik (1965) interprets these findings by positing that larger organizations contain more potential and necessary communication linkages among members, rendering adequate communication more difficult to achieve. The result of inadequate communication among members serves to decrease interpersonal attractiveness and, in turn, member participation rates. Porter and Lawler (1965) in their review have concluded that although job satisfaction and morale tend to be lower in larger organizations, the general findings relevant to this area are neither reliable nor clear. Porter and Lawler (1965) argue that perhaps subunit size is a more crucial determinant of employee reaction than is total organization. On the basis of an examination of the results of several investigations, Steers (1977) suggests important patterns of findings. On the one hand, increased organization size appears to be positively associated with increased efficiency. Such factors as orderly managerial succession, reduced labour costs, and environmental control may all be thought of as some aspect of getting the job done in an orderly, efficient manner.

On the other hand, size also appears to be inversely related to employee attachment to an organization. A trend appears to exist in which increase in the size of an organization may lead to some efficiency but such efficiency may be brought about at the cost of increased negative attitudes of employees toward the organization. Moreover, such efficiency may ultimately lead to an increased unwillingness on the part of employees to remain within the organization.

On the line of suggestion of Porter and Lawler (1965), Woodward (1965), too has stressed for a more differentiated concept of size, stressing the importance of indexing size by reference to the size of managerial system. It seems important to consider the effects of variations in the size of a work group as opposed to the size of the entire organization. For employees, increases in work-group size are consistently associated with lower job satisfaction, lower attendance and retention rates, and more labour disputes (Baumgartner & Sobol, 1959; Indik & Seashore, 1961; Katzell, Barrett & Parker, 1961; Khandwalla, 1974). More recently, Kimberly (1976) has critically reviewed the role of size as a variable in studies of organizational structure. He has argued that size has generally been defined in terms too global to permit its relation to organizational structure to be understood adequately.

However, although these findings indicate a definite trend, they do not provide an answer as to why increases in the size of a work group should be inversely related to various facets of effectiveness. A possible explanation may lie in the increased

affiliative opportunities that are typically associated with smaller work groups (Cartwright & Zander, 1968). Lichtman and Hunt (1971) have recognized the need of more research related to size variable. This need has been recently further emphasized by Kimberly (1976) and therefore this variable was appropriately selected in the present research endeavour.

Management Level: Bureaucracy focuses on staffing and structure of organization as a means of dealing with clients and achievement of efficiency (Weber, 1947; Mouzelis, 1967). In this view efficiency is maximized by organizing offices according to jurisdiction and hierarchical position. However, it has been rightly pointed out that researchers in the study of organizations have "tended either to ignore organizational levels or to concentrate on simple dichotomy between managers and workers" (Saiyadain, 1977. p. 29).

Several studies have reported relationship between organizational levels and job satisfaction. The results of these studies do not show unambiguous relationship. Some studies have shown positive relationship; some have shown no relationship; while others have indicated the effect of moderator variables in determining the relationship between organizational levels and job satisfaction. For example, of the earlier studies, two (Hoppock, 1935; and Centers, 1948) revealed a positive correlation between organizational levels and job satisfaction. Herzberg, Mausner, Peterson, and Capwell (1957) in their review of literature related to job satisfaction and organizational levels remarked that "one unequivocal fact emerges from the studies of job satisfaction; the

higher the levels of occupations, the higher the morale" (p. 20). Some other later studies have reported similar findings (Rosen & Weaver, 1960; Rosen, 1961; Friedlander, 1965; Kornhauser, 1965). In a recent study, Singh and Srivastava (1975) have reported positive relationship between organizational levels and job satisfaction.

In a number of other studies job satisfaction was measured in terms of need fulfilment. In this respect, a pioneering study was done by Porter (1961) who investigated need-fulfilment deficiency in the lower and middle management levels. On the basis of his results, he writes "the vertical location of management positions appears to be an important variable in determining the extent to which psychological needs are fulfilled" (p. 9). In another follow up study, Porter (1962) administered need deficiency questionnaire on a sample of top managers, upper-middle managers, lower-middle managers and lowest level managers. The results suggested an increasing degree of satisfaction on three higher order needs with increasing levels. Some other investigators also using Porter's methodology have supported above-mentioned general results (Edol, 1966; Eran, 1966; Miller, 1966; Porter & Michell, 1967). In a recent study of three levels of managers of public enterprises in India, Narain (1973) found that while security was recognized by all levels of managers as the most important need, personal growth and social recognition increased with increasing levels of hierarchy. Narain (1973) has argued that the task variables and responsibility associated with high level positions

greatly contribute to job satisfaction among incumbents.

In several other studies lack of positive relationship between organizational levels and job satisfaction has been reported. In a study by Starcevich (1972), first line supervisors, middle managers, and professional employees did not significantly affect the judged order of importance of job factors for either job satisfaction or job dissatisfaction. Similarly, Armstrong (1971), Hulin and Smith (1965), and Mass (1966) failed to demonstrate the role of organizational levels on job satisfaction.

Some other studies highlight the effect of moderator variables on the relationship between organizational levels and job satisfaction. For examples, Porter (1963) has reported that at lower levels of management, small company managers were more satisfied than large company managers. However, at higher levels of management, large company managers were more satisfied than small company managers. Cummings and Elsalmi (1968) did not find similar findings in their study. In their study, managers in top management levels in small companies experienced more satisfaction than those in large size companies. Middle and lower level managers in large size companies were more satisfied than those in small size companies. They have also reported organizational structure interacting with occupational levels. Tall organizations produced more satisfaction among top level managers than flat and intermediate structure. This was reversed in the case of middle and lower-middle level managers.

Saiyadain (1977) in his critical review has pointed out that the contradictory findings can be understood on the basis of methodological and conceptual considerations. He suggests that contradictions in the results can be attributed to methodological artifacts. There could be two possible sources of such artifacts. First, samples from different organizations are amalgamated for classification into broad organizational level categories in the same study. Second, various levels either from one company or from different companies are combined to represent categories of various organizational levels. For example, Porter (1961) drew his sample from three companies: a large nation-wide company manufacturing consumer containers, another involved in processing and distribution of food products, and the third, a medium size utility firm. These three firms provided three levels of management. In another study, Porter (1962) selected his sample from "numerous types and sizes of companies located throughout the country" (p. 376). From these companies, he selected five levels of management for his studies.

The procedure adopted for selection of samples in these studies accepts a wrong principle that all organizations are alike and therefore, employees of these organizations could be put together according to the level. Saiyadain (1977) rightly further argues that "... in some of the reported studies these categories are very broad and often ill-defined. On the surface such classification seems justified but it is apparent that within these categories, there is considerable heterogeneity in status, potential for upward mobility and specific occupational role demands"

(p. 31). For example, Porter (1962) assigned subjects to five categories of management levels by the titles of their companies. Several other studies have selected their samples on the basis of salary drawn (Narain, 1973). Thus, it seems from the above that a kind of methodological error may confound the validity of relationship between organizational levels and job satisfaction. Saiyadain (1977) suggests the second source of contradiction in results may be found in the way in which job satisfaction has been defined and measured.

More recently, Saiyadain (1977) in his study has examined the relationship between organizational levels and job satisfaction with controls for the conceptual and methodological artifacts. Data were collected on 84 employees from four organizationally adjacent levels from the same unit of an organization. Porter's (1961) Need Satisfaction questionnaire (PNSQ), Brayfield and Rothe's (1951) Job Satisfaction Index (JSI) questionnaire were administered. The results revealed increased satisfaction with increasing levels, particularly with reference to esteem, autonomy, and self-actualization. However, size of the sample and external validity of the findings are major constraints with this study. Further, some of the criticisms mentioned earlier are also true for Saiyadain's study (1977).

Study of organizational hierarchical level has been also done in the context of leadership style (Jago & Vroom, 1977). Large size formal organizations have multiple hierarchical levels and are pyramidal in shape. As one ascends the managerial hierarchy,

the number of managers at each level progressively diminishes and the nature of their responsibilities becomes less concerned with the direction of day-to-day operations and more concerned with diagnosing environmental changes and planning the organization's responses to these changes. Jago and Vroom (1977) have reported that use of participative methods does increase with level and that this occurs both as a result of beliefs concerning the utility and appropriateness of participative practices, which are more characteristic of higher level managers, and differences in the nature of decisions to be made as one ascends the organizational hierarchy. Some earlier studies have also reported such results with similar interpretations (Blankenship & Miles, 1968; Heller & Yukl, 1969).

Argyris (1957, 1964) has recognized the importance of the organizational hierarchy factor in need satisfaction and psychological success of the individual. Argyris (1964) cites a number of empirical studies showing that workers at the lower end of the organizational hierarchy, as opposed to those at higher levels, suffer from poorer mental health, lower job satisfaction, and lower levels of self-esteem, feelings of security, and other related variables. The resulting feelings of dependence, subordination, and passivity on the part of the workers can only result in "...frustration, failure, short-term perspective, and conflict" (1964, p. 40).

Thus, it seems that hierarchy in organization is an important variable for understanding individual's satisfaction and other aspects of organizational behaviour. Most of the previous

studies reported are based on data collected in organizations involving several methodological problems. In this study, therefore, hierarchy was included along with other independent variables.

Authoritarianism: Lichtman and Hunt (1971) suggest that people react to their organizations on the basis of their perceptions of it. These perceptions are based on their needs, motives and values. Therefore, according to this approach, which is called the personalistic views in organizational theory, to understand human behaviour in organizations, one must understand how individuals differ with respect to personalistic variables. Further, to change organizations, one must alter perceptions of people. The impetus of this view rests largely with the writings of Kurt Lewin (1951) and Hawthorne group (Roethlisberger & Dickson, 1939). According to Lewin (1951) a person is active in the behavioural process and not as just a passive recipient of discrete stimuli. The process of organizational analysis must then consist largely of personnel assessments. It further implies that organizational change must consist solely in the changing of people. To some extent, such a premise is fundamental to what may be termed "Clinical" approaches to organization development (Schein & Bennis, 1965).

Similarly, the Hawthorne or Western Electric studies (Roethlisberger & Dickson, 1939) findings indicated that there was no one best level. As the Hawthorne researchers saw it, the implications for management did not lie in any gross restructuring of the organization, but rather in a programme of individual counseling designed to change the perceptions of individual workers

toward the organization. Influenced by above-mentioned lines of researches, many writers (Lichtman & Hunt, 1971) have concentrated their theoretical efforts toward evaluating the role of the individual and work group as a determinant and have encouraged an individual differences approach to the study of organizational behaviour.

Argyris (1957) has argued for the assumption that organizational behaviour develops from the interaction of the individual and the formal organization. Authoritarianism (Adorno, Frenkel-Brunswick, Levinson, & Stanford, 1950) as a personality characteristic seems to be a relevant variable for understanding organizational behaviour. It becomes particularly more important when one attempts to understand individual differences in a bureaucratic organization. Recently, in an analysis, Khandwalla (Note 1) maintains that a mechanistic or bureaucratic orientation means a great deal of emphasis on formalizing all activities and relationships and communication, and a great deal of emphasis on formal job descriptions and standard operating procedures. An authoritarian orientation implies a reliance on orders, threats and the like for getting changes implemented rather than on persuasion, joint problem solving or bargaining. A non-authoritarian orientation implies a reluctance to rely on orders, threats etc. to implement changes. This analysis supports appropriateness of examining effects of authoritarianism along with other structural variables like bureaucracy, size and hierarchy on perceived need satisfaction in organization.

The empirical study of authoritarianism for understanding organizational behaviour in our social context has been emphasized by several Indian investigators (Sinha, 1973a; Note 2, Kakar, 1971; Salyadain, 1975). Western observers (Taylor, 1948; Murphy, 1953; McClelland & Winter, 1969) report that Indians, by and large, are authoritarians. Historically, the source of authoritarianism is traced to the feudal system in India where landlords used to imitate the life patterns of king ..., a king who was supposed to be an embodiment of God, all powerful, knowledgeable etc. People were like children who had to be loyal and obedient, in return for being nurtured and protected. Davis (1951) calls India's caste system as the most thoroughgoing attempt in human history to utilize absolute inequality as the basis for our society. Through feudal lords the authoritarian system was made available to Indian families which nursed and developed it. Western research in their quantitative investigations have clearly shown the role of parental antecedents on the development of authoritarianism. Authoritarianism scores have been found to correlate positively with a scale measuring Traditional Family Ideology (conventionalism, authoritarian submission, exaggerated masculinity and femininity, extreme emphasis on discipline, and moralistic rejection of impulse life) in a series of studies on adults subjects (Levinson, Huffman & Phyllis, 1955). Byrne(1965) has also reported in general similar findings.

Employees of an organization carry with them their cultural norms and dispositions. Sinha (1973a) argues that if

Indians are said to be authoritarians (Huss, 1971), they are likely to seek support, protection, and guidance from their superiors as well as extend similar nurturance to their subordinates (Hagen, 1962). Sinha (1973a) further argues that since government bureaucrats were familiar only with the rigid bureaucratic organizational structure, they have succeeded in transplanting similar bureaucracy in newly emerged organizations in post-independence era of India. To make certain that the transplantation of bureaucracy is complete, senior government officers are very frequently deputed to head new organizations which are being established (Nigam, 1967). In an analysis of historical background of Indian work organizations, Kakar (1971) argues that although the administrative practices and methods of Indian organizations were in general modeled after the British pattern, the authority relation was not only of superiors and sub-ordinates, but of British superiors and Indian subordinates. Kakar (1971) clearly maintains that the authoritarian elements in their relations with their Indian subordinates were greatly exaggerated by the social-psychological exigencies of colonial situation. Most Britishers, whatever their convictions about authority relations at home, showed a high degree of authoritarianism (Misra, 1970). Recently, Saiyadain (1975) has argued that authoritarianism is related to interactions of supervisors and subordinates in such a way as to permit reliable predictions of behaviour in organizations. It seems on the basis of the above discussion, that the role of authoritarianism as a personality disposition needs to be

investigated for understanding individual's behaviour in bureaucratic organizational set-ups which so predominantly exist in our society.

Dependent Variables and Research Problem

The characteristics of organizational structure have long been considered to have a major impact on the attitudes, behaviour and overall satisfaction of individuals in organizations (James & Jones, 1976). For example, in their analysis, Lichtman and Hunt (1971) separated structural theories into traditional structural theories (Marx, 1964; Taylor, 1971; Weber, 1947) and modern structural theories (Argyris, 1964; Blake & Mouton, 1968; Likert, 1967; McGregor, 1960). In spite of their theoretical differences regarding human behaviour in organizations, the two structural approaches shared the view that the social structure of the organization is the "primary determinant of differential human characteristics" (Lichtman & Hunt, 1971, p. 271). Modern organizational psychology is dominated by the theories and researches of the modern structural theorists. The literature has tended to focus on models such as theory X - Theory Y, mechanistic-organic, bureaucratic-nonbureaucratic, and so forth (Bennis, 1969). With respect to relationships with individual attitudes and development, the bureaucratic-non-bureaucratic dichotomy has received the majority of attention. For example, Bennis (1969) identified among the observed dysfunctions of bureaucracies, a failure to allow for the growth and development of mature personalities, as an important dysfunction. Critical

reviewers of literature (Lichtman & Hunt, 1971; James & Jones, 1976) have argued that in contrast to the the bureaucratic model, a modern organization model such as the human relations model assumes that the individual is a total human being striving for self improvement, self-expression, autonomy, recognition and self-actualization.

The three most publicized and researched theories of motivation are Maslow's need hierarchy, Herzberg's two-factor theory and Alderfer's ERG theory. Maslow's (1954) need hierarchy theory postulates that people in the workplace are motivated to perform by a desire to satisfy a set of internal needs which are arranged in a hierarchy from the basic (e.g. food and shelter) to the complex (e.g. ego, status, achievement). The five classifications of needs according to Maslow are: (1) physiological; (2) safety and security; (3) social and belonging; (4) ego, status, and esteem; and (5) self actualization. A second popular content theory of motivation closely related to Maslow's need hierarchy was proposed by Herzberg and his associates (Herzberg, Mausner, & Snyderman, 1959). The theory, which has been called the two-factor theory or the motivation-hygiene theory, has been widely received and applied by managers concerned with the motivation of their employees. Herzberg has reduced Maslow's five levels of needs into two distinct levels of analysis. The hygiene factor or dissatisfiers are equivalent to Maslow's lower level needs. They are preventive factors that serve to reduce dissatisfaction but do not lead to satisfaction. The motivators, or satisfiers, are

equivalent to Maslow's higher level needs. There are job-content factors that motivate people to perform. According to Herzberg, only such aspects as a challenging job, recognition for doing a good job, and opportunities for advancement, personal growth, and development function to provide a situation for motivated behaviour. A more recently proposed motivation approach is Alderfer's (1972) ERG theory. Alderfer condenses the Maslow hierarchy into three need categories: existence (E); relatedness (R); and growth (G). Existence needs are all the various forms of physiological and material desires, such as hunger, thirst and shelter. Relatedness needs include all those that involve interpersonal relationships with others in the workplace. Growth needs are all those needs that involve a person's efforts towards creative or personal growth on the job. Thus, satisfaction of growth needs results from an individual engaging in tasks that not only require the person's full use of his or her capabilities, but may also require the development of new capabilities. Maslow's self actualization and certain of his self-esteem needs are comparable to these growth needs.

Since the formulation of Maslow's need theory, numerous research studies have been made on need hierarchy in organizations. Maslow's constructs were first operationalized by Porter (1961, 1964). The physiological needs of the respondents were assumed to have been adequately satisfied and therefore were not included. An additional category "autonomy" was inserted between esteem and self actualization categories. A sample of managers from different

companies indicated that managers higher in the organization chain of command placed greater emphasis and were more satisfied with the needs for esteem, autonomy and self actualization than were lower level managers (Porter, 1961, 1962). As discussed earlier, Porter has demonstrated effects of management levels on need satisfaction (Porter, 1962, 1963, 1964).

Hall and Nougaim (1968) collected data from the first five years of the careers of a group of managers to test Maslow's hierarchy of human needs. In accordance with the findings of other studies, they reported that as managers advance, their need for safety decreases, and the needs for affiliation, achievement and esteem, and self actualization increases. In another study, Ivancevich (1969) found that American managers working abroad were more satisfied with autonomy opportunities than were their counterparts working in United States.

Very recently, Mitchell and Moudgill (1976) have reported a ten-item instrument for measurement of Maslow's need hierarchy. They analysed responses for five factors. The factors corresponded to the security, social, esteem, autonomy, and self-fulfilment categories. Analysis for two factors resulted in separation of the security needs from the higher needs. They have further suggested more rigorous research to establish validity of Maslow's need hierarchy constructs.

Some Indian investigators have also examined need satisfaction in organizational settings. For example, Gopalkrishnayya (1973) has studied managerial satisfaction and performance in

private and public sector organizations. Using multivariate analysis, he found that in private organizations the department heads develop more successfully than section managers and first line supervisors. In two independent studies, Singhal (1975, 1976) has examined need satisfaction. Singhal's (1975, 1976) findings support to some extent the contention that the organizational behaviour of employees is determined by their perceived need-satisfaction and need-importance.

In another recent study, Kanungo, Misra, and Dayal (1975) examined relationship of job-involvement to perceived importance and satisfaction of employees needs. Results revealed that the attitudes to job-involvement acted as a moderator variable only with respect to employee's evaluation of the importance of needs on the job. High involved employees, as compared to low involved employees, attached greater importance to safety and self actualization needs and less importance to physiological and social needs. With respect to the patterns of need gratification and need strength, the high and low involved employees did not differ. The investigators failed to find support for several hypotheses derived from Maslow's need hierarchy notion.

Research conducted in India and abroad, however, failed to examine in a systematic manner effects of individual's and organizational characteristics on need satisfaction. Most of the studies reported are based on survey. James and Jones (1976) have rightly remarked that it is hard to find studies where organizations have been differentiated on the basis of sound measures of

structural characteristics. Thus, methodologically, it would be better to adopt a procedure where all other variables are constant and systematic; variations are only made in the independent variables of interest during experiment. Therefore, for this project, experimental method was adopted. This review of literature fully explains the importance and justification of study of organizational bureaucracy, size, hierarchy and authoritarianism, and relationship of these variables with needs satisfaction. It is an important question to examine how, with systematic variation in organizational bureaucracy, size, management level, and individual's authoritarianism, need-satisfaction of the individuals vary. In other words the objective of this research was to investigate how need-satisfaction is determined by the factors mentioned above.

To achieve an answer to the above-mentioned research questions the present project was planned with two independent experiments. In the first experiment, the main objective was to examine effects of independent variables like organizational bureaucracy, size and management level on needs satisfaction. In addition to needs of safety, social, self-esteem, autonomy and self actualization, two other dependent measures like alienation and perceived power were included. It was expected that high bureaucratic organizational structure and lower position in organizational hierarchy will function negatively in need satisfaction. It was further conjectured that small size organization will be more conducive for need satisfaction than large size organization.

In addition, it was expected that the three structural variables will also influence dependent measures jointly.

The second experiment involves only two variables i.e. organizational bureaucracy and individual authoritarianism. The main objective of this experiment was to demonstrate how high and low authoritarians differ in need satisfaction particularly in bureaucratic set-up. It was hypothesized that may be authoritarians will feel more comfortable and satisfied in high bureaucratic organization than low bureaucratic organization. Some additional dependent variables like quality of work, job-satisfaction and productivity were included.

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Experiment - 1

METHODSubjects:

Subjects were 54 male undergraduate students of Indian Institute of Technology, Kanpur, India.

Design:

A 3 x 2 x 2 (mixed model) factorial design with three levels of management position (top/middle/low) as between factor; two levels (high/low) organizational bureaucratic structure and two levels of size (large/small) as within factors were used in the study. 18 subjects were randomly assigned to each of the top, middle and the lower levels of management.

Procedure:

Experiment was conducted individually on subjects. When subject reported for experiment, experimenter gave him the general instruction sheet (Appendix-A) which presented a picture of the importance of organizations in the life of modern man. The purpose of this instruction-sheet was to make subject familiar with the experiment. General instructions suggested that human beings spend a maximum of their time in different types of organizations. Subjects were told that after completion of formal education, they would be looking for a job. They were reminded that frequently one starts thinking about such organizations even if one has not formally joined a particular organization.

Subject was further informed that descriptions of different organizations would be provided and he would be asked to assume

himself as an employee of those organizations. Subject was requested to read the descriptions of the organizations very carefully and to give his reactions on the questionnaire to be provided.

The second part of instructions included the description of management position to which subject was assigned. There were three different description-sheets (Appendix-B₁, B₂, B₃) for each of the three management positions (top level/middle level/lower level). The responsibility, facility, prestige and duties of those three levels managers vary with each other according to their management positions. The maximum facilities and power were given to the top level managers and minimum to the lower level managers. The top level managers have control over middle and lower level managers while middle level managers have control over the lower level managers only. The lower level managers have two higher levels of managers above themselves. The top level managers have the most privileged position. Thus, using appropriate instructions, subject was assigned to one of the three management levels for the experiment.

According to the experimental design, each subject was provided four organizational descriptions in random order based on bureaucracy and size of organizations. The descriptions of high and low organizations were prepared on the basis of salient characteristics of bureaucracy, such as, existence of rules, hierarchy of authority, technical-competence and impersonal relationship etc. The descriptions of large and small size organizations were based on: (1) number of people working in the organization and (2) the

interaction-possibilities among the members of organizations. Thus, two levels of bureaucracy and size produced four types of organizations:

- (1) high bureaucracy and large size (Appendix-C₁),
- (2) low bureaucracy and large size (Appendix-C₂),
- (3) high bureaucracy and small size (Appendix-C₃),
- (4) low bureaucracy and small size (Appendix-C₄).

Each subject studied the description of one organization at a time. Then, subject was asked to complete a dependent measure questionnaire (Appendix-D), largely based on Porter's (1961) Need Satisfaction Questionnaire (PNSQ). PNSQ consists of 13 items classified into a Maslow-type need hierarchy system. Subject was given the questionnaire and was told that in the questionnaire several characteristics or qualities connected with management positions are listed. Subject was further instructed that for each such characteristic, he would be required to give three ratings:

- (a) How much of the characteristics is there now connected with your management position?
- (b) How much of the characteristics do you think should be connected with your management position?
- (c) How important is this position characteristic to you?

In this manner each subject was provided with four organizational descriptions and each subject responded on the dependent measure questionnaire for each organization.

Post-Experimental Questionnaire:

Lastly, subject was requested to complete the post-experimental questionnaire for experimental manipulation checks.

To check effectiveness of descriptions related to organizational bureaucratic structure and size, subject was asked two questions (Appendix-E) after each of the four experimental conditions (based on within factors). In addition, at the end of the experiment, subject was asked questions related to his perception of instructions and management position.

Dependent Variables:

Porter's (1961) Need Satisfaction Questionnaire (PNSQ) was used as a measure of the dependent variables. In addition to PNSQ, two more items (on a seven point scale) were included to measure the dependent variables of perceived sense of power and alienation (Appendix-D). Each item of PNSQ measures not only the existing degree of need-fulfilment but also the expected level of fulfilment and its importance to the respondent. Items are answered by subject on separate 7-point scales, one each for expected, existing and importance. The anchor points of scales are labeled as minimum and maximum. Thus a typical item looked like this on the questionnaire:

The feeling of self-esteem a person gets from being at my management position:

- (a) How much is there now? (Min) 1 2 3 4 5 6 7 (Max)
- (b) How much should there be? (Min) 1 2 3 4 5 6 7 (Max)
- (c) How important is this to me? (Min) 1 2 3 4 5 6 7 (Max)

PNSQ does not contain an equal number of items for all the needs included in it. The security need has one item, social need has two, esteem and self-actualization have three each; and autonomy has four items.

In view of the unequal number of items for each need in (PNSQ), it was decided to calculate the mean score for each need. Subsequent analysis was done with the mean scores.

PLAN FOR DATA ANALYSIS.

Literature review shows that various concepts and operations have been used for the measurement of need satisfaction. Evans (1969) in his critical analysis has made an effort to explore the conceptual and operational relationships among overall satisfaction, level of aspiration, level of attainment and level of importance. Based on some of the suggestions of Evans (1969) the following methods were used for data analysis of the present study to understand different aspects of need-satisfaction.

(1) Need Satisfaction: Existing

The mean scores of the existing aspect of all the five needs were added separately and used as an index of existing need satisfaction. This may be presented in the following way:

$$NF = \sum_{Needs} (NAtt)$$

(2) Need Satisfaction: Expected

The difference between the level of need expectation and the level of need attainment is taken to be the index of need satisfaction. The analysis was done with the sum of the mean d-scores for each need separately. For example:

$$NF = \sum (NAtt - N_{Exp})$$

In the computation of d-scores, some scores were found to be positive and some negative. Such as:

Existing		Expected		
5	-	3	=	2
3	-	5	=	-2

To make all the scores positive (which was done for the convenience of analysis) a constant of score 8 (higher than the maximum negative score found in the responses of the subjects) was added.

(3) Need Satisfaction: Importance

Need fulfilment is the sum of the product of need attainment and its importance. For example:

$$NF = \sum (N_{Att} \times N_{Imp}).$$

To measure need fulfilment on the basis of the importance of need to individual, discrepancy scores between 'need existing' and 'importance' were used by Porter (1961). However, Evans (1968) and Imparto (1972) raised some conceptual and methodological issues in relation to the meaning of need satisfaction and d-scores. An example will indicate the problems involved in Porter's methodology. Let us assume that three people respond within the following levels of importance and attainment:

Importance	7	5	2
Attainment	7	5	2

They will all, by this method of combination, have perfect satisfaction (in this case reported by zero satisfaction). Surely, a multiplicative model (Importance x Attainment) in which

satisfaction scores of 49, 25, and 4, respectively, were obtained, would be a more accurate representative of reality. It enables the management to identify situations in which low attainment is coupled with high importance and the opposite situation in which high attainment is coupled with low importance. Researchers seem to be divided on this issue. Some have defined need satisfaction without any reference to importance of needs (Porter and Lawler, 1968). On the other hand, it has been pointed out that the assessment of importance is contained within part of any direct satisfaction rating (Locke, 1969). Value of importance contributes extensively to our understanding of job-satisfaction. Katzell (1964) in this theoretical treatment of job-satisfaction recognizes the value of importance to the individual.

Imparto (1972) has raised the issue in relation to the meaning of d-score. A person who indicates 4 on expected and 1 on actual need fulfilment gets a d-score of 3. Another person who indicates 7 on expected and 4 on actual also gets a d-score of 3. The question is whether these two scores mean the same. He found the location of d-score to be related to different levels of satisfaction but studied only two PNSQ items (authority and opportunity for determination of methods and practices). No rationale was given as to why only two items out of 13 were chosen for this kind of analysis, so it cannot be said with certainty whether this kind of conclusion will hold true for the other eleven items.

Overall Need Satisfaction

The multiplicative model (Importance x Attainment) is also not considered appropriate as a measure of overall need fulfilment. So another method was applied in which overall need-fulfilment is the sum of the product of need importance and the difference between need aspiration and need attainment. Thus, this procedure combines all the three aspects of need in analysis,

$$NF = \sum (N_{Imp} \times (N_{Asp} - N_{Att}))$$

In this method d-scores were found to be both positive and negative. Both (positive and negative) types of scores were multiplied by the corresponding importance scores of the needs. For example:

Importance Score		d-score	
7	x	-7	= -49
7	x	7	= 49

By adding a constant score of 50 the products of importance and d-scores were transformed into positive scores.

This method of combination of need-fulfilment is considered to be the most congruent with the conceptual framework, but it is not necessary that it will be the better predictor of overall need fulfilment than the others. Evans (1969) has given one reason for this, that the measurement of importance may not be well developed. Ross and Zander (1957) have said that one observed tendency is for every respondent to report that every goal or facet of the job is of equal importance to him with a consequent restriction of range of variation in the measure. Thus, four different types of measures were used in this study for data-analysis.

RESULTS

Separate analysis involving $3 \times 2 \times 2$ mixed model of ANOVA was computed for each dependent measure to determine separate and joint effectiveness of all the three independent variables. As discussed earlier in the section of plan for data analysis, the data of each need were analysed in four different ways.

Checks of Experimental Manipulations:

Analysis of the items of post-experimental questionnaire shows that the manipulation of size and management position was effective. Subjects of top, middle and lower management levels perceived their managerial levels accordingly. Subjects in large and small size organizational conditions did perceive size of organization as large and small accordingly. Experimental manipulation related to bureaucratic organizational structure was found most effective. Subjects in high bureaucratic organizational structure ($M = 7.54$) perceived organizational description as significantly more bureaucratic than in less bureaucratic organizational structure ($M = 2.98$), $F(1,51) = 538.77$, $P < .01$ level. Subjects of all experimental conditions said that they followed the instructions completely (Mean range = 5.94 to 6.22).

Security Need:

Table-1 presents the summary of ANOVA of three aspects (i.e. existing, expected, and importance) and overall satisfaction of security need. For existing aspect of security need, the main effect of size is found to be significant with more satisfaction of security need in small size organization ($M = 4.76$) than in large

TABLE-1 Summary of Analysis of Variance: Security Need

Sources	df	Existing			Expected			Importance			Overall Satisfaction		
		MS	F		MS	F		MS	F		MS	F	
A. Management level	2	6.17	2.36		7.31	1.15		35.69	0.31		337.35	2.41	
Error (A)	51	2.62	-		6.35	-		273.29	-		139.89	-	
B. Bureaucracy	1	7.04	1.52		0.30	0.08		284.74	1.85		26.74	0.25	
BA	2	4.85	1.05		2.37	0.62		162.57	1.06		87.46	0.82	
SS x B (Error B)	51	4.62	-		3.81	-		153.99	-		106.79	-	
C. Size	1	6.34	5.18*		0.67	0.37		181.50	4.08*		11.57	0.26	
CA	2	1.28	1.05		0.85	0.46		10.67	0.24		13.02	0.29	
SS x C (Error C)	51	1.22	-		1.83	-		44.50	-		45.22	-	
BC	1	0.04	0.04		0.17	0.10		2.24	0.05		0.30	0.01	
BCA	2	0.13	0.12		0.18	0.11		7.46	0.15		66.46	1.71	
SS x BC (Error BC)	51	1.08	-		1.59	-		48.61	-		38.86	-	

* $P < .05$ ** $P < .01$

size organization ($M = 2.97$). For importance aspect of security need the same results were found. Subjects in small size organization ($M = 24.67$) perceived more fulfilment of security need than in large size organization ($M = 22.84$).

Social Need:

Table-2 reveals that for all the four types of analysis of social need, main effects of bureaucracy and size are significant. The social need fulfilment is found to exist more in low bureaucratic organization ($M = 5.35$) than in high bureaucratic organization ($M = 3.10$). Subjects perceived that social need exists more in small size organization ($M = 4.73$) than in large size organization ($M = 3.76$).

In addition, related to expected aspect of social need satisfaction, fulfilment was perceived more in low bureaucratic organization ($M = 7.98$) than high bureaucratic organization ($M = 6.13$). In case of size factor, it is found that in small size organization ($M = 7.39$) subjects perceived social need-fulfilment more in comparison to large size organization ($M = 6.73$). The joint-effect of bureaucracy and size reached significance level. Figure-1 suggests that maximum social need-fulfilment was found in low bureaucratic small size organization ($M = 8.14$) and minimum need-fulfilment was found in high bureaucratic-large size organization ($M = 5.66$).

The importance aspect of social need was also consistent with the above results. Subjects in low bureaucratic organization ($M = 28.40$) perceived more fulfilment than in high bureaucratic

TABLE-2 Summary of Analysis of Variance: Social Need

Sources	df	Existing		Expected		Importance		Overall Satisfaction	
		MS	F	MS	F	MS	F	MS	F
A. Management level	2	2.56	0.34	2.07	0.61	170.95	1.02	64.14	0.54
Error (A)	51	7.62	-	3.42	-	167.52	-	118.50	-
B. Bureaucracy	1	1098.00	173.30**	185.19	128.40**	8778.38	146.57**	4939.28	78.41**
BA	2	4.06	0.64	0.75	0.52	12.76	0.21	5.41	0.09
SS x B (Error B)	51	6.34	-	1.44	-	59.89	-	63.00	-
C. Size	1	187.04	36.27**	23.34	20.94**	1107.04	20.08**	527.35	15.42**
CA	2	1.10	0.21	0.03	0.03	14.29	0.26	1.01	0.03
SS x C (Error C)	51	5.10	-	1.11	-	55.13	-	34.20	-
BC	1	5.04	1.88	4.74	7.18**	94.67	2.90	91.91	5.87*
BCA	2	0.10	0.04	0.17	0.26	4.57	0.14	6.97	0.45
SS x BC (Error BC)	51	2.69	-	0.66	-	32.59	-	15.66	-

* $\underline{P} < .05$ ** $\underline{P} < .01$

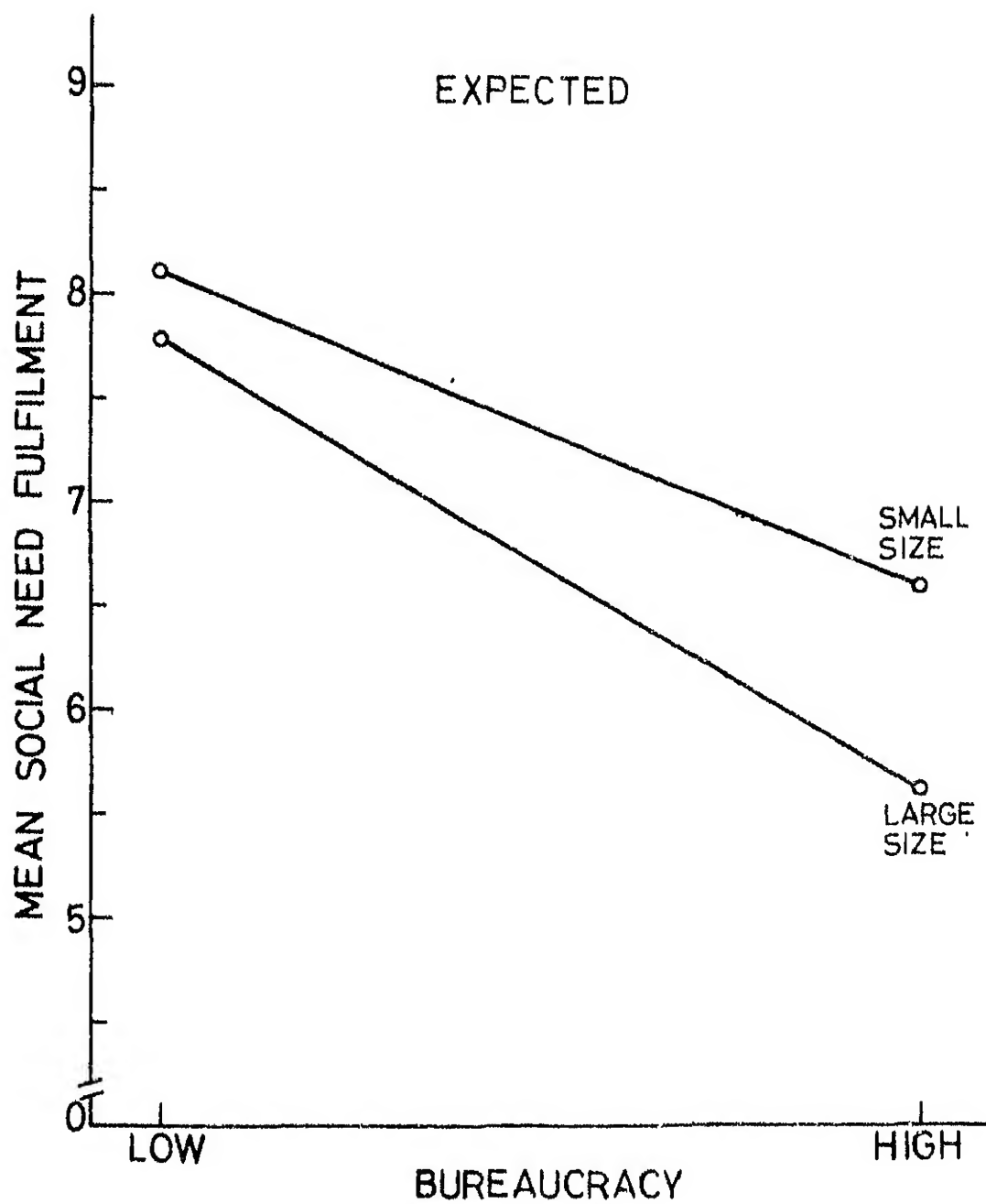


Fig. 1 Social need fulfilment as a function of size and bureaucracy.

organization ($M = 15.65$). More fulfilment of social-need was perceived in small size organization ($M = 24.29$) than in large size organization ($M = 19.76$).

Analysis of overall satisfaction of social need revealed significant main effects of bureaucracy, size and their two-way interaction. The subjects perceived satisfaction of social need more in low bureaucratic organization ($M = 49.41$) than in high bureaucratic organization ($M = 39.86$). Similarly, in small size organization ($M = 46.19$) the fulfilment of social need was perceived more than in large size organization ($M = 43.06$). Two-way interaction effect of these two factors presented in Figure-5 shows maximum social-need fulfilment in low bureaucratic-small size organization ($M = 50.32$) and minimum in high bureaucratic - large size organization ($M = 37.63$).

Esteem-Need:

Table-3 shows significant main effects for management level and size regarding existing aspect of self-esteem need satisfaction. The esteem-need was found to exist more with increasing level of management. The top level managers ($M = 4.77$) perceived maximum self-esteem and the minimum self-esteem was perceived by the lower level managers ($M = 3.89$). The perceived satisfaction of self-esteem need of middle level managers ($M = 4.54$) was found between lower and top level managers. In case of effectiveness of bureaucracy, self-esteem was perceived to exist more in low bureaucratic organization ($M = 4.91$) than in high bureaucratic organization ($M = 3.85$).

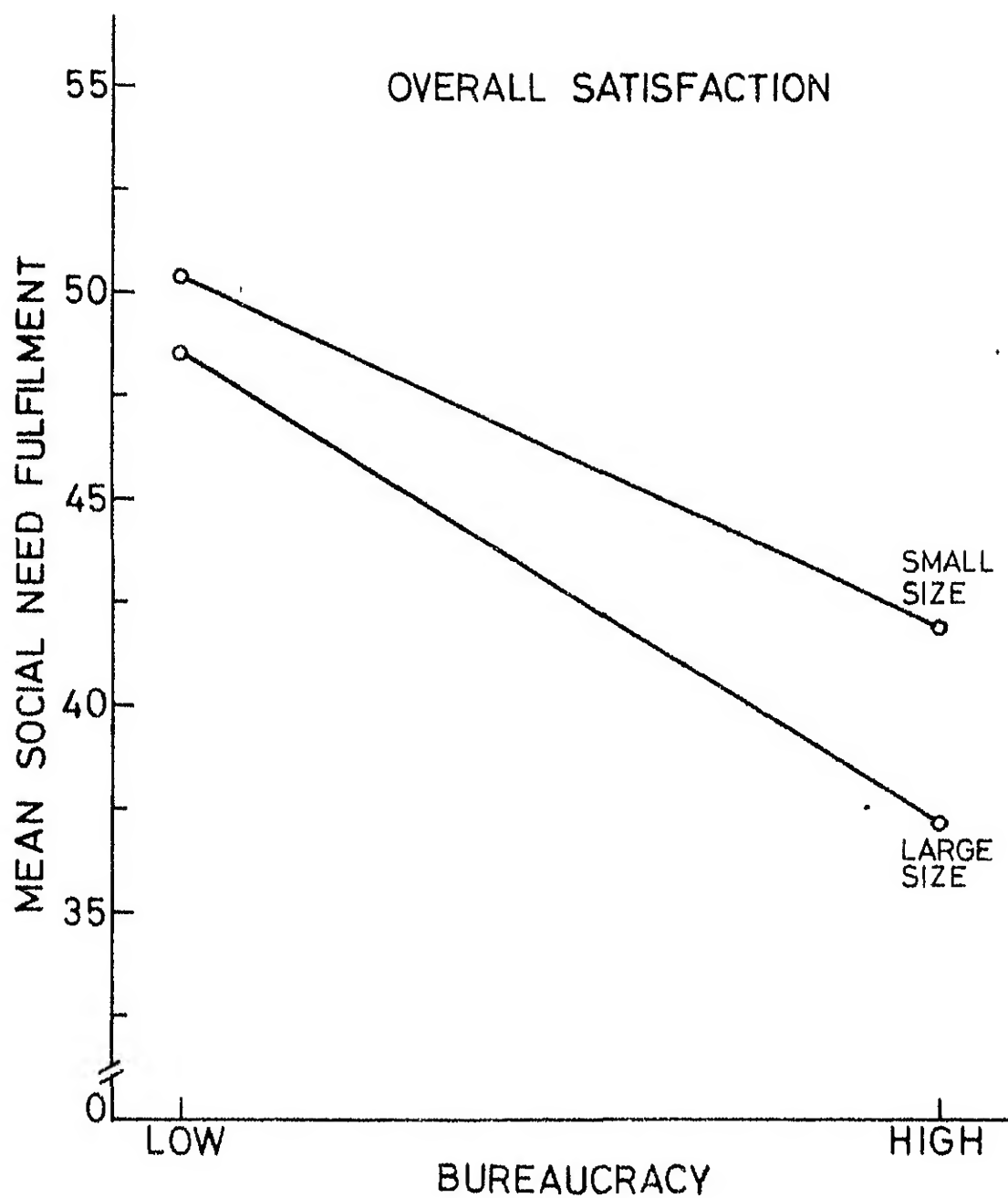


Fig. 2 Social need fulfilment as a function of size and bureaucracy.

TABLE-3 Summary of Analysis of Variance: Esteem Need

Sources	df	Existing		Expected		Importance		Overall Satisfaction	
		MS	F	MS	F	MS	F	MS	F
A. Management level	2	136.56	8.72**	3.96	1.83	456.37	2.33	148.80	1.47
Error (A)	51	15.66	-	2.16	-	195.47	-	101.45	-
B. Bureaucracy	1	554.24	41.82**	34.88	30.30**	2515.36	41.39**	1131.19	23.71**
BA	2	14.17	1.07	0.78	0.68	68.43	1.13	15.86	0.33
SS x B (Error B)	51	13.25	-	1.15	-	60.77	-	47.71	-
C. Size	1	4.74	0.73	1.43	3.01	12.57	0.47	87.30	5.29*
CA	2	11.23	1.73	0.04	0.09	58.27	2.17	11.95	0.72
SS x C (Error C)	51	6.50	-	0.48	-	26.81	-	16.50	-
BC	1	0.91	0.24	0.14	0.48	2.30	0.13	37.39	2.90
BCA	2	3.84	1.02	0.62	2.21	3.31	0.19	9.33	0.72
SS x BC (Error BC)	51	3.76	-	0.28	-	17.20	-	12.90	-

* $P < .05$ ** $P < .01$

The expected aspect of esteem-need fulfilment was significantly determined by bureaucracy. In low bureaucratic organization ($M = 7.28$) self-esteem need fulfilment was observed more by subjects than in high bureaucratic organization ($M = 6.48$).

The effect of bureaucracy is seen to be significant on perceived importance aspect of self-esteem. In low bureaucratic organization ($M = 28.05$) satisfaction of esteem-need was found more than in high bureaucratic organization ($M = 21.29$).

Overall satisfaction of esteem need was significantly determined by bureaucracy and size factors. In low bureaucratic organization ($M = 45.82$) need fulfilment was found more in comparison to high bureaucratic organization ($M = 41.25$). For size, large size organization ($M = 44.17$) is perceived as providing more esteem than small size organization ($M = 41.25$).

Autonomy Need:

Table-4 presents summary of autonomy need. For existing satisfaction of autonomy need, the effect of management level and bureaucracy were found significant. The maximum existing autonomy was perceived by top level managers ($M = 4.72$), next by middle level managers ($M = 4.28$) and minimum by the lower level managers ($M = 3.68$). Similarly in low bureaucratic organization ($M = 5.27$) autonomy was perceived to exist more in comparison with high bureaucratic organization ($M = 3.28$).

The main effects of management level and bureaucracy were found significant for expected aspect of autonomy need. The top level managers ($M = 7.17$) perceived more autonomy, then middle

TABLE-4 Summary of Analysis of Variance: Autonomy Need

Sources	df	Existing		Expected		Importance		Overall Satisfaction	
		MS	F	MS	F	MS	F	MS	F
A. Management level	2	312.76	9.34**	8.20	5.01*	673.76	5.37**	434.90	5.12*
Error A	51	33.50	-	1.64	-	125.58	-	85.00	-
B. Bureaucracy	1	3783.41	135.63**	131.76	80.38**	8651.34	120.78**	4627.79	68.99**
BA	2	53.20	1.91	1.19	0.72	136.41	1.90	14.91	0.22
SS x B (Error B)	51	27.90	-	1.64	-	71.63	-	67.08	-
C. Size	1	14.52	1.75	0.95	2.04	35.21	1.48	0.29	0.02
CA	2	20.78	2.51	0.48	1.03	45.47	1.91	3.95	0.21
SS x C (Error C)	51	8.28	-	0.46	-	23.86	-	18.80	-
BC	1	13.50	2.05	0.95	2.49	14.00	0.70	40.90	2.92
BCA	2	1.79	0.27	0.04	0.11	17.50	0.85	11.29	1.02
SS x BC (Error BC)	51	6.60	-	0.38	-	20.10	-	14.02	-

* $\underline{P} < .05$

** $\underline{P} < .01$

level managers ($M = 6.80$) and lastly the lower level managers ($M = 6.50$). However, subsequent analysis using Newman Keuls (Winer, 1971) procedure suggested that the middle and lower level managers did not differ significantly. Autonomy was perceived more in less bureaucratic organization ($M = 6.04$). The effect of management level and bureaucracy were also found significant for importance aspect of autonomy need satisfaction. More satisfaction of autonomy need was perceived by top level managers ($M = 27.68$), than by the middle level managers ($M = 24.60$) and by the lower level managers ($M = 21.57$). In case of bureaucracy, autonomy need fulfilment was perceived more in low bureaucratic organization ($M = 30.95$) in comparison to high bureaucratic organization ($M = 18.29$).

Overall satisfaction of autonomy need was significantly determined by factors of management level and bureaucracy. Consistent with results reported earlier autonomy need was observed more in top level managers ($M = 45.65$), then in middle level ($M = 41.56$) and lower level managers ($M = 41.24$). Internal mean comparison indicated no significant difference between lower and middle level managers. In case of bureaucracy, in low bureaucratic organization ($M = 47.44$) the autonomy was perceived more in comparison to high bureaucratic organization ($M = 38.19$).

Self-Actualization Need:

The main effects of three independent variables (management level, bureaucracy and size) significantly determined perceived self-actualization need fulfilment (Table-5). The fulfilment of self-actualization need is existing maximum among top level managers

TABLE-5 Summary of Analysis of Variance: Self-Actualization

Sources	df	Existing			Expected			Importance			Overall Satisfaction	
		MS	F		MS	F		MS	F		MS	F
A. Management level	2	77.14	4.97*		10.25	4.42*		167.69	1.16		370.59	2.30
Error A	51	15.53	-		2.32	-		145.17	-		160.10	-
B. Bureaucracy	1	3874.74	138.23**		210.24	104.36**		12321.61	100.77**		9105.22	86.73**
BA	2	2.56	0.12		0.94	0.47		39.97	0.33		54.81	0.52
SS x B (Error B)	51	20.80	-		2.01	-		122.28	-		104.99	-
C. Size	1	35.85	9.24**		0.84	1.51		86.90	3.18		208.08	10.85**
CA	2	5.89	1.52		0.07	0.13		33.53	1.23		68.38	3.56*
SS x C (Error C)	51	3.88	-		0.56	-		27.34	-		19.19	-
BC	1	0.17	0.03		0.00	0.00		10.39	0.36		18.48	0.71
BCA	2	3.79	0.74		0.09	0.20		23.30	0.80		48.01	1.85
SS x BC (Error BC)	51	5.15	-		0.44	-		29.21	-		25.95	-

* $P < .05$ ** $P < .01$

($M = 4.54$), then middle level ($M = 4.21$) and lower level managers ($M = 3.85$). The difference between top and middle level managers was not found significant when means were compared by using Newman Keuls method (Winer, 1971). In low bureaucratic organization ($M = 5.42$) fulfilment of self-actualization was perceived more in comparison to high bureaucratic organization ($M = 2.99$). In case of size, subjects in small size organization ($M = 4.34$) perceived more self-actualization than in the large size organization ($M = 4.07$).

The main effects of management level and bureaucracy were found significant for expected aspect of self-actualization need. The maximum self-actualization need fulfilment was perceived by the top level managers ($M = 6.83$), then by middle level ($M = 6.36$) and by the lower level managers ($M = 5.98$). Internal mean comparison indicated no significant difference between top and middle level managers. In case of bureaucracy, the self-actualization was perceived more in low bureaucratic organization ($M = 7.41$) compared to high bureaucratic organization ($M = 5.43$).

The effect of bureaucracy was found significant for the importance aspect of self-actualization need. In low bureaucratic organization ($M = 32.98$) satisfaction of self-actualization need was perceived more by subjects than in high bureaucratic organization ($M = 17.88$).

Overall satisfaction of self-actualization was determined by bureaucracy and size. In low bureaucratic organization ($M = 46.56$) satisfaction of self-actualization need was perceived more than high bureaucratic organization ($M = 33.57$). In case of size,

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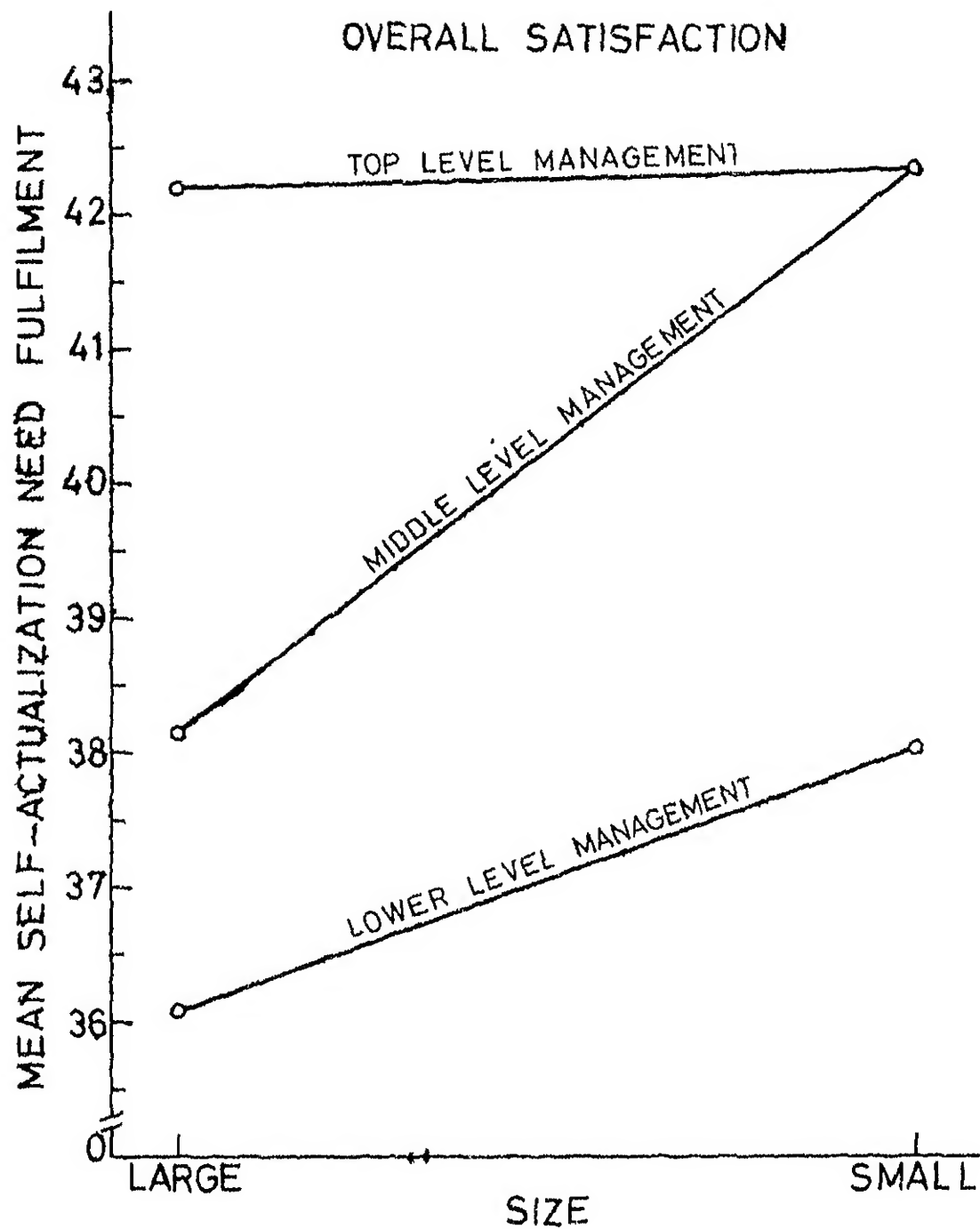


Fig. 3 Self-actualization need fulfilment as a function of management level and size.

small size organization ($M = 41.60$) is perceived healthy for self-actualization need-fulfilment than large size organization ($M = 39.85$). The tow-way interaction effect of management level and organizational size roached significance level. Figure-3 shows that the maximum self-actualization need-fulfilment was perccived by the top level managers in small size organization ($M = 42.36$) and minimum by the lower level managers in large size organization ($M = 36.91$).

Alienation and Power:

Table-6 reveals that the main effects of bureaucracy and size significantly determined perception of alienation. In high bureaucratic organization ($M = 4.34$) alienation was perceived more by subjects in comparison to less bureaucratic organization ($M = 2.89$). In large size organization ($M = 3.90$) the alienation is perceived more by subjects than in small size organization ($M = 3.33$).

In case of power, the main effects of management level and bureaucracy roached significance level. More power was perceived by the top level managers ($M = 4.63$) than middle level ($M = 3.96$) and lower level managers ($M = 3.72$). Internal mean comparison shows that the difference between middle and lower level managers is not significant. However, subjects perceived more power in low bureaucratic organization ($M = 4.79$) in comparison to high bureaucratic organization ($M = 3.77$).

TABLE-6 Summary of the Analysis of Variance of Alienation and Power

Sources	df	Alienation		Power	
		MS	F	MS	F
A. Management level	2	0.03	0.01	15.78	4.80 ⁺
Error A	51	2.73	-	3.28	-
B. Bureaucracy	1	114.12	44.03 ^{**}	40.91	20.73 ^{**}
BC	2	5.48	2.11	5.98	3.03
SS x B (Error B)	51	2.59	-	1.98	-
C. Size	1	17.23	10.22 ⁺	-	-
CA	2	1.53	0.91	1.79	1.17
SS x C (Error)	51	1.69	-	1.53	-
BC	1	4.45	2.57	0.30	0.19
BCA	2	4.81	2.78	0.62	0.39
SS x BC (Error BC)	51	1.73	-	1.57	-

* $\bar{P} < .05$ ** $\bar{P} < .01$

DISCUSSION

Results of the post-experimental questionnaire data reveal that experimental manipulations of bureaucracy, management level and size are highly effective. Subjects of all experimental conditions followed the instructions completely.

The major finding of the study implicates the role of bureaucracy in perceived need-satisfaction. As discussed earlier, for each need, the four aspects (existing, expected, importance and overall satisfaction) were measured and obtained data were analysed.

Results clearly indicate that with an exception of security need, the bureaucracy factor significantly determines perceived satisfaction of social, self-esteem, autonomy and self-actualization needs across different aspects of need satisfaction. Low bureaucratic organization is perceived as a better source of need satisfaction (social, self-esteem, autonomy and self-actualization) in comparison to high bureaucratic organization.

In addition results reveal that high bureaucracy significantly affects perceptions of alienation. On the other hand, low bureaucratic organization makes the individual perceive himself powerful in the organization. In low bureaucratic organization, perhaps the individual perceives opportunities for change and innovation and therefore, he feels less alienated and more powerful in comparison to high bureaucratic organization.

The effect of management levels is found to be significant only for higher level needs i.e. self-esteem, autonomy and

self-actualization. Results clearly reveals that for satisfaction of higher level needs, higher level of management position is facilitative. Increasingly more satisfaction with self-esteem, autonomy and self-actualization needs is perceived by higher level managers in comparison to lower level managers. This finding is quite in accordance with the hypothesis of present study and findings of the earlier studies (Argyris, 1964 and Lichtman and Hunt, 1971). Jago and Vroom (1977) have rightly argued that participation and flexibility in decision making increases with ^{an} increase in the management level. This provides a feeling of self-esteem, autonomy and self-actualization.

The findings suggest that organizational size appears to be inversely related to perceived need satisfaction. Subjects perceive small size organization as a source of greater satisfaction of security, social and to some extent self-actualization needs in comparison to large size organization. Furthermore, large size organization is perceived as providing more self-esteem and alienation than small size organization. A close look at the results suggests that size factor is most effective in determining the satisfaction of social need.

Cartwright and Zander (1968) have argued that the more affiliative opportunities are typically associated with small work group. Thus, due to more opportunities for affiliation, in small size organization, subjects perceive more social need satisfaction in comparison to large size organization.

Interaction effects of size and bureaucracy are significant for perceived satisfaction of social need. Small size and low bureaucratic organization is highly facilitative for social need satisfaction. It seems that both factors function in additive manner (Figures 1 and 2). Perceived overall satisfaction of self-actualization need is significantly determined by size and management level factors. Figure 3 indicates that satisfaction of self-actualization need is not determined by variation in organizational size in top-level management. However, middle and lower level managers' perceived satisfaction of self-actualization need changes a great deal with variation in size factor, with significantly more satisfaction in small size than large size organization. It is quite possible that for top level managers, size of organization may hardly matter. By virtue of their position, they have opportunities for self-actualization but this opportunity is not available to middle and lower level managers.

Thus, the findings of the study implicate for the role of bureaucracy, size and management level in perceived need satisfaction. Undoubtedly, bureaucracy factor has emerged as a strong determinant of need satisfaction. However, need satisfaction in organization is a complicated process and should not be understood in simplistic terms. The significant main and interaction effects of all the three variables suggest how different structural variables of organization determine the need-satisfaction.

Experiment - 2

METHODSubjects:

The subjects were undergraduate students of the Indian Institute of Technology, Kanpur. One hundred and seventeen students participated in pre-testing out of which thirty two subjects were selected for actual experiment.

Pre-testing:

To measure authoritarianism of subjects, F-scale (see Appendix-F) was administered on one hundred and seventeen undergraduates. Several other investigators in India have used the adopted form of F-scale (c.g., Bhushan, 1969) in their researches. An adopted form of F-scale (Bhushan, 1969) was used in this study (Appendix-F). The split-half reliability coefficient of this scale was found to be $r = .89$, $P < .01$, for one hundred and seventeen pretested subjects.

On the basis of scores on F-scale, two groups of subjects were selected. High authoritarian subjects had F-scores ranging from 146 to 189 (the fourth quartile range) and low authoritarian subjects had F-scores ranging from 60 to 117 (the first quartile range). F-score means of high and low authoritarian groups were 151.38 and 98.75 respectively. These two means differed significantly $F(1,32) = 103.08$, $P < .001$.

Design:

A 2 x 2 factorial design based upon two levels (high/low) of authoritarianism of subjects and two levels of organizational

bureaucratic structure (high/low) was employed yielding four experimental conditions. Out of 32 subjects, 16 subjects were high on authoritarianism and 16 subjects were low on authoritarianism. 8 subjects from each of the two groups were put in the high and low bureaucratic organizations on a random basis.

Procedure:

Experiment was conducted individually on each subject. When subjects reported for experiment, experimenter first gave him general instructions (Appendix-G) explaining to him how in modern life a man is tied with different types of organizations. Subject was also told how organizations of different sorts have proliferated in our modern era to the point where much of our daily life in one way or another, is spent in organizational activity. Subject was further told that as he approached the completion of his formal academic training, he would start thinking about his future plans. He would face the problem of selecting an organization for his possible job. Frequently, he might be thinking about such organizations even if he had not formally joined one. Climate, structure, administrative set-up and facilities in different organizations vary. Subject was asked to read the description of an organization and put himself mentally in that organization, as if he was working in it. He was told in advance that after he had read the organizational description, he would be asked to complete a brief questionnaire regarding his reactions.

After the above-mentioned general instructions had been given according to experimental design, subject was provided with

the description of either a highly bureaucratic or a less bureaucratic organization. The description of high/low bureaucratic organization was based on the following characteristics of bureaucracy as discussed earlier in the chapter of introduction: the hierarchy of authority, existence of strict rules, technical-competence, rules regarding the functions and procedures and impersonal relationship etc. (Appendix-H₁, H₂). Subjects were asked to go through the descriptions very carefully and then to complete the questionnaire intended to measure dependent variables. Each subject completed a post-experimental questionnaire before the experiment was terminated after debriefing.

Dependent Measures:

The dependent measures questionnaire included items to measure perceived need fulfilment, quality of work, productivity, job-satisfaction and alienation. As described earlier in the Introduction Section, security, social, esteem, autonomy and self-actualization needs were included in the questionnaire and three items were selected from Shneider's scale (Shneider and Alderfer, 1973) for each need with a total of fifteen items (Appendix-I). In addition, one item for each of the other dependent measures was included in the questionnaire. All items of the questionnaire were on a 7-point scale ranging from 1 (minimum) to 7 (maximum).

Post-Experimental Questionnaire:

A post-experimental questionnaire was used as a check of the experimental manipulations. It was used to measure the

effectiveness of instructions regarding the hypothetical organizational situation, the subject's understanding of the instructions, and perceived levels of bureaucracy (see Appendix-J). The questionnaire included three items on a 7-point scale.

RESULTS

Separate analysis of variance involving 2 x 2 factorial design was computed to determine the effectiveness of the two independent variables (bureaucracy and authoritarianism) on each dependent measure. As mentioned in the Methodology Section, three items were employed to measure each perceived need fulfillment. The analysis of variance was computed separately for each item (range = 1 to 7) and also for the total sum of the scores (range 3 to 21) of the three items included for the measurement of each need. For other dependent variables such as productivity, quality of work, job satisfaction and alienation, similar analysis were done.

Checks of Experimental Manipulations:

Analysis of post-experimental questionnaire revealed the effectiveness of experimental manipulations. Subjects of all experimental conditions confirmed that they were able to imagine themselves as members in a hypothetical organizational situation (Mean Range = 5.25 to 5.62). Subjects also said that they followed the instructions of the experimenter (Mean Range = 5.5 to 6.5). Experimental manipulation related to bureaucratic organizational structure was most effective. Subjects of high bureaucratic organizational structure ($M = 5.69$) perceived organizational description as significantly more bureaucratic than subjects of less bureaucratic organizational structure ($M = 2.13$, $F(1,28) = 10.88$, $p < .01$).

Security Need:

Table-7 presents a summary of ANOVA of perceived fulfillment of security need scores of each individual item as well as of the

TABLE-7 Summary of Analysis of Variance: Security Need

Sources	df	Item 1		Item 2		Item 3		Total Scores	
		MS	F	MS	F	MS	F	MS	F
A. Authoritarianism	1	7.03	5.25*	4.50	2.70	5.28	2.84	40.50	5.65*
B. Bureaucracy	1	12.50	9.26**	8.00	4.85*	9.03	4.85*	10.13	1.41
A x B	1	1.13	0.84	0.13	0.07	0.78	0.42	6.13	0.85
Error	28	1.35	-	1.65	-	1.86	-	7.17	-

* $P < .05$ ** $P < .01$

total scores based on the sum of the scores of the three items. Results show that on total scores, low authoritarian ($M = 12.75$) subjects showed significantly greater perceived satisfaction than high authoritarian subjects ($M = 10.50$). For item - 1 of the effect of authoritarianism was found to be significant with more satisfaction in low authoritarian subjects ($M = 3.90$) than in high authoritarian subjects ($M = 3.19$). For item - 2 and 3 the low authoritarian subjects showed a trend of perceiving more satisfaction of security need than high authoritarian subjects however these mean differences did not reach a significance level.

The effect of bureaucracy is found to be significant for item 1. In low bureaucratic organization ($M = 4.06$) the security need of subjects is perceived to be significantly more fulfilled than that of the subjects of high bureaucratic organization ($M = 3.65$). For item 2, it was found that significantly more perceived satisfaction existed in subjects of low bureaucratic organization ($M = 4.13$) than subjects of high bureaucratic organization ($M = 3.25$). However, for item 3 the result is found to be in the reverse order. Perceived security need fulfilment is found to be significantly more in subjects of high bureaucratic organization ($M = 4.43$) in comparison to subjects of low bureaucratic organization ($M = 4.28$). It seems that the inconsistent results of the three items had a balancing effect leading to the insignificant effect of bureaucracy on the total scores,

Social Need:

Table-8 is a summary of the analysis of variance of perceived fulfilment of social need scores of each individual items

TABLE-8 Summary of Analysis of Variance: Social Need

Sources	df	Item 1		Item 2		Item 3		Total Scores	
		SS	F	MS	F	MS	F	MS	F
A. Authoritarianism	1	2.00	1.98	0.03	0.02	0.12	0.09	1.53	0.27
B. Bureaucracy	1	15.13	14.38**	9.03	8.44---	45.13	32.81**	185.28	33.75**
A x B	1	1.13	1.12	1.53	1.43	3.13	2.22	0.28	0.05
Error	28	1.07	-	1.07	-	1.41	-	5.50	-

* $P < .05$ ** $P < .01$

as well as of the total scores based on the sum of scores of the three items. Results reveal that for total scores, subjects in low bureaucratic organization condition ($M = 15.44$) perceived the social need as significantly more fulfilled than subjects of high bureaucratic organization ($M = 12.81$). For item 1 social need fulfilment is perceived significantly more by subjects in low bureaucratic organization ($M = 4.85$) than high bureaucratic organization ($M = 3.91$). Results of item 2 indicate significantly more satisfaction in subjects of low bureaucratic organization ($M = 5.00$) than in subjects of high bureaucratic organization ($M = 4.44$). In case of item 3 satisfaction by subjects in low bureaucracy ($M = 4.50$) is found to be perceived significantly more than by subjects in high bureaucratic organization ($M = 3.38$). Thus, in low bureaucratic organization condition subjects consistently perceived more satisfaction than subjects of high bureaucratic organization condition. No main effects related to authoritarianism and interaction effect reached a significance level for this dependent measure.

Esteem-Need:

Table-9 presents the summary of ANOVA of perceived fulfilment of esteem need scores of each individual item as well as of the total scores based on the sum of scores of three items. Results show that in the total of the sum of scores of the three items, the main effects of both factors i.e., authoritarianism and bureaucracy are significant. High authoritarian subjects ($M = 12.69$) perceived significantly more esteem need satisfaction than low authoritarian subjects ($M = 10.94$). The main effect of bureaucracy was found

TABLE-9 Summary of Analysis of Variance: Esteem Need

Sources	df	Item 1		Item 2		Item 3		Total Scores	
		MS	F	MS	F	MS	F	MS	F
A. Authoritarianism	1	4.50	3.10	0.50	0.29	4.50	3.28	24.50	4.08*
B. Bureaucracy	1	40.50	27.33+-	40.50	23.28+-	15.13	11.04+-	276.13	46.01**
A x B	1	2.00	1.38	0.13	0.07	0.13	0.03	2.00	0.33
Error	28	1.45	-	1.74	-	1.37	-	6.01	-

* $P < .05$

** $P < .01$

significant with more perceived satisfaction by subjects of low bureaucratic organization ($M = 14.75$) than subjects of high bureaucratic organizational condition ($M = 8.88$).

For item 3 the esteem-need fulfilment is perceived more by high authoritarian subjects ($M = 4.13$) than by low authoritarian subjects ($M = 3.44$) and in item 2 the difference is there in esteem need fulfilment between high ($M = 4.07$) and low authoritarian subjects ($M = 3.8$) but it did not reach significance level.

The effect of bureaucracy is highly significant across all the items. In the analysis of total of sum of the three items scores, significantly high esteem-need satisfaction was perceived by the subjects in low bureaucratic organization ($M = 14.75$) than by subjects of high bureaucratic organization ($M = 8.89$). For item 1 satisfaction of esteem-need was perceived significantly more by subjects in low bureaucratic organization ($M = 4.00$) than by subjects of high bureaucratic organization ($M = 3.75$). For item 2 subjects in low bureaucratic organization ($M = 4.44$) perceived significantly more esteem-need fulfilment than subjects of high bureaucratic organization ($M = 3.44$). In case of item 3 subjects in low bureaucratic organization ($M = 3.91$) perceived esteem-need fulfilment significantly more than subjects in high bureaucratic organization ($M = 3.60$). Thus, consistently in low bureaucratic organization esteem-need fulfilment is found to be more than the high bureaucratic organization. Interaction effect did not reach significance level.

Autonomy Need

Table-10 presents the summary of analysis of variance of perceived autonomy need fulfilment. Results show that the main effect of bureaucracy is found to be significant for three individual items as well as for total scores based on sum of the three items. The analysis of total scores of the sum of scores of the three items suggest that subjects of low bureaucratic organization ($M = 15.94$) perceived significantly more satisfaction of autonomy need in comparison to subjects of high bureaucratic organization ($M = 6.81$). For item 1 autonomy need fulfilment is perceived significantly more by subjects in low bureaucratic organization ($M = 4.59$) than by subjects in high bureaucratic organization ($M = 2.90$). For item 2 autonomy need fulfilment is perceived significantly more by subjects of low bureaucratic organization ($M = 4.56$) than by subjects of high bureaucratic organization ($M = 2.94$). In case of item 3, the same trend was found. Subjects of low bureaucratic organization ($M = 4.69$) perceived significantly more satisfaction of autonomy need than subjects of high bureaucratic organization ($M = 3.60$).

For item 3 the interaction effect of these two factors reached significance level (Figure-4). The maximum cell mean is observed (Figure-4) in the group of low authoritarian and low bureaucratic organization condition ($M = 6.00$) and minimum cell mean is found in the group of low authoritarian and high bureaucratic organization ($M = 2.13$). No main effect related to authoritarianism was found to be significant.

TABLE-10 Summary of Analysis of Variance: Autonomy Need

Sources	df	Item 1		Item 2		Item 3		Total Scores	
		SS	F	SS	F	SS	F	SS	F
A. Authoritarianism	1	0.50	0.38	3.13	1.85	1.13	0.72	4.50	0.76
B. Bureaucracy	1	105.13	75.09**	55.13	32.62**	66.13	41.85**	666.13	113.87**
A x B	1	1.13	0.81	0.50	0.29	8.00	5.06*	21.13	3.61
Error	28	1.40	-	1.69	-	1.58	-	5.85	-

* $P < .05$

** $P < .01$

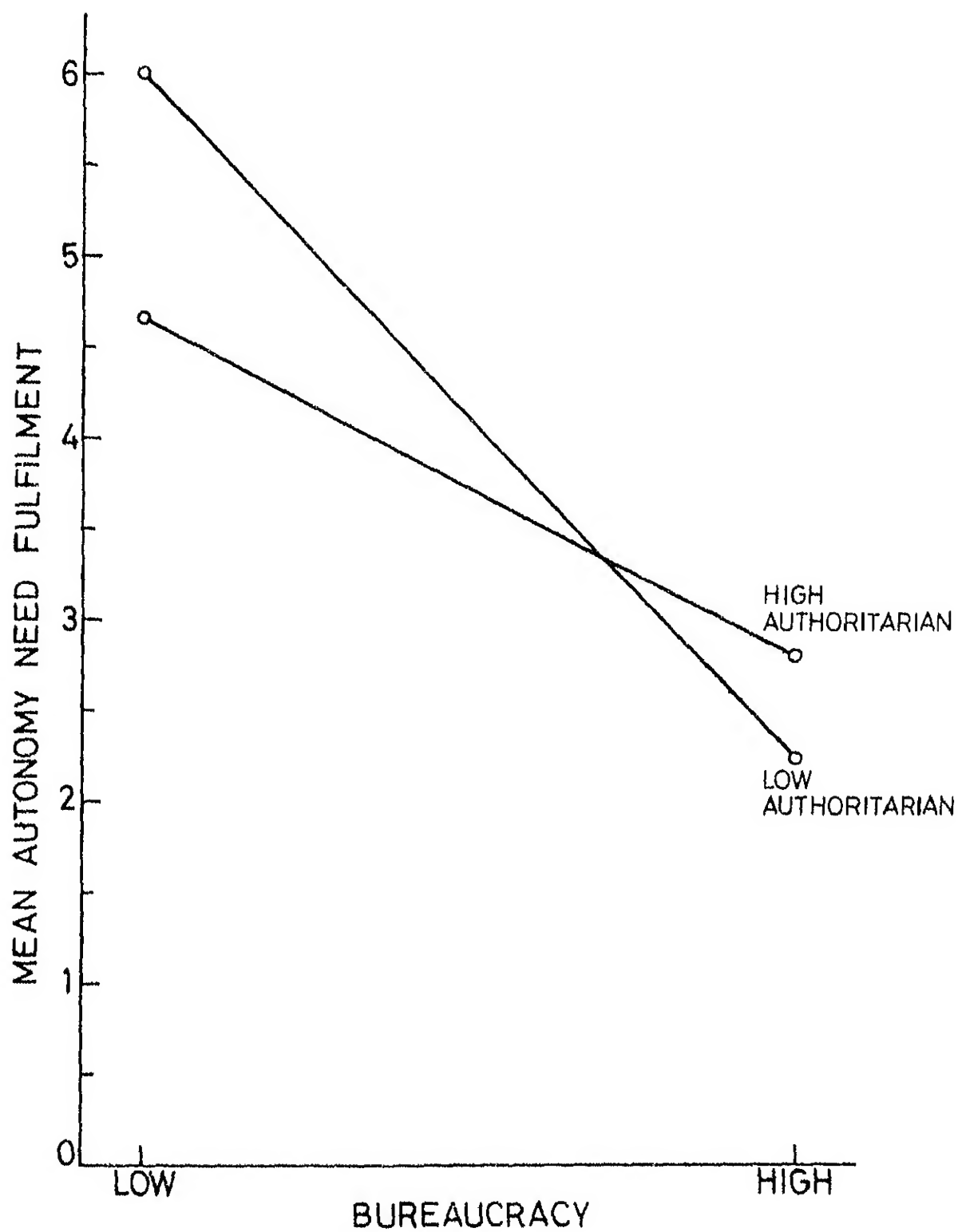


Fig.4 Autonomy need fulfilment as a function of authoritarianism and bureaucracy.

Self-Actualization Need:

Table-11 presents the summary of analysis of variance of self-actualization need. The effect of bureaucracy is found significant for each individual item as well as for the total scores. The results of total scores reveal that self-actualization need was perceived significantly more fulfilled by subjects of low bureaucratic organization ($M = 15.13$) than subjects of high bureaucratic organization ($M = 6.56$). The effect of bureaucracy is found to be significant for item 1. In low bureaucratic organization ($M = 4.53$) self-actualization need is perceived to be significantly more fulfilled by subjects ($M = 4.53$) as against subjects in high bureaucratic organization ($M = 2.54$). For item 2, it was found that significantly more satisfaction existed in subjects of low bureaucratic organization ($M = 4.10$) than subjects of high bureaucratic organization ($M = 2.97$). For item 3 also, it was found that subjects of low bureaucratic organization ($M = 4.38$) perceived significantly more self-actualization need satisfaction than subjects of high bureaucratic organization ($M = 2.69$).

The joint effect of bureaucracy and authoritarianism is also found to be significant for item 2 (Figure-5). The maximum cell mean (Figure-5) is noticed in low authoritarian subjects under less bureaucratic organization ($M = 5.00$) and the minimum self-actualization need fulfilment is found to be in low authoritarian subjects under high bureaucratic organization ($M = 1.88$). No main effect regarding authoritarianism was found to be significant.

TABLE 11 Summary of Analysis of Variance: Self-Actualization

Sources	df	Item 1		Item 2		Item 3		Total Scores	
		MS	F	MS	F	MS	F	MS	F
A. Authoritarianism	1	0.28	0.20	0.28	0.30	1.53	1.31	0.03	-
B. Bureaucracy	1	81.28	56.44**	47.53	50.57**	69.03	50.90**	586.53	77.18**
A x B	1	1.53	1.06	3.78	4.02	2.53	2.16	22.78	3.00
Error	28	1.44	-	0.94	-	1.17	-	-	-

* $\underline{p} < .05$ ** $\underline{p} < .01$

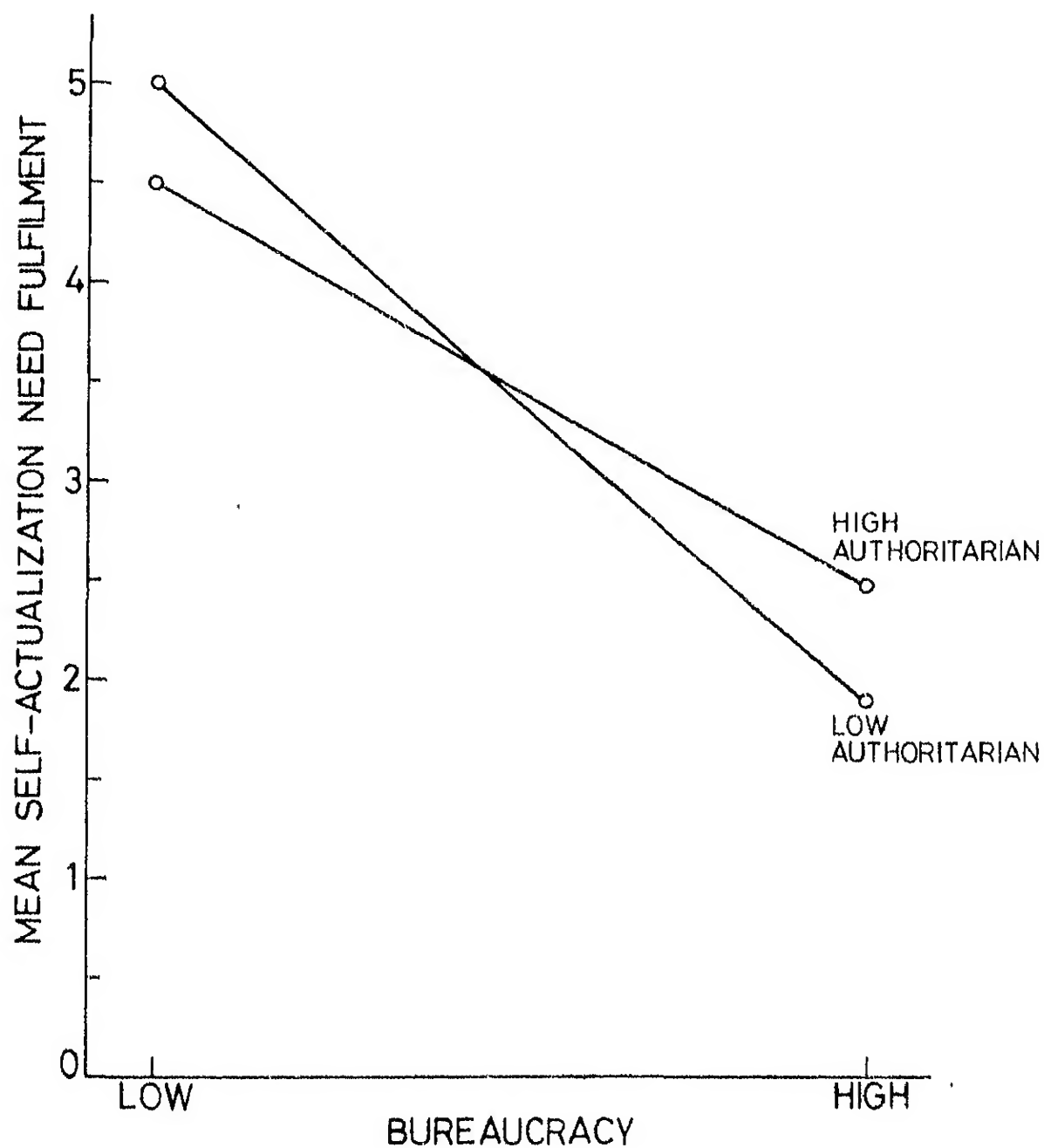


Fig. 5 Self-actualization need fulfilment as a function of authoritarianism and bureaucracy.

Quality of Work:

Table-12 presents the summary of analysis of variance of quality of work. Results reveal that main effect of bureaucracy is found significant. In low bureaucratic organization ($M = 4.81$) the quality of work was perceived significantly higher than the high bureaucratic organization ($M = 3.94$). The two-way interaction effect (Figure-6) of authoritarianism and bureaucracy was also found to be significant. The high quality of work was perceived by the low authoritarian subjects under less bureaucratic organization ($M = 4.88$) and the low quality of work was perceived by the low authoritarian subjects in high bureaucratic organization condition ($M = 3.25$).

Productivity:

Table-12 presents summary of the analysis of variance of productivity. Neither the main effects of bureaucracy and authoritarianism nor their interaction were found to be significant.

Job Satisfaction:

Table-12 presents the summary of analysis of perceived job-satisfaction. The main effect of bureaucracy is found to be significant. Subjects perceived significantly more job-satisfaction

TABLE 12 Summary of Analysis of Variance: Quality of Work; Productivity; Job-satisfaction and Alienation

Sources	df	Quality of work		Productivity		Job-satisfaction		Alienation	
		MS	F	MS	F	MS	F	MS	F
A. Authoritarianism	1	3.13	3.40	0.28	-	0.13	-	7.03	5.25+
B. Bureaucracy	1	6.13	6.66*	5.28	3.18	66.13	59.04**	30.03	22.41**
A x B	1	4.50	4.89*	0.03	-	0.50	-	0.78	0.58
Error	28	0.92	-	1.65	-	1.12	-	1.34	-

* $P < .05$

** $P < .01$

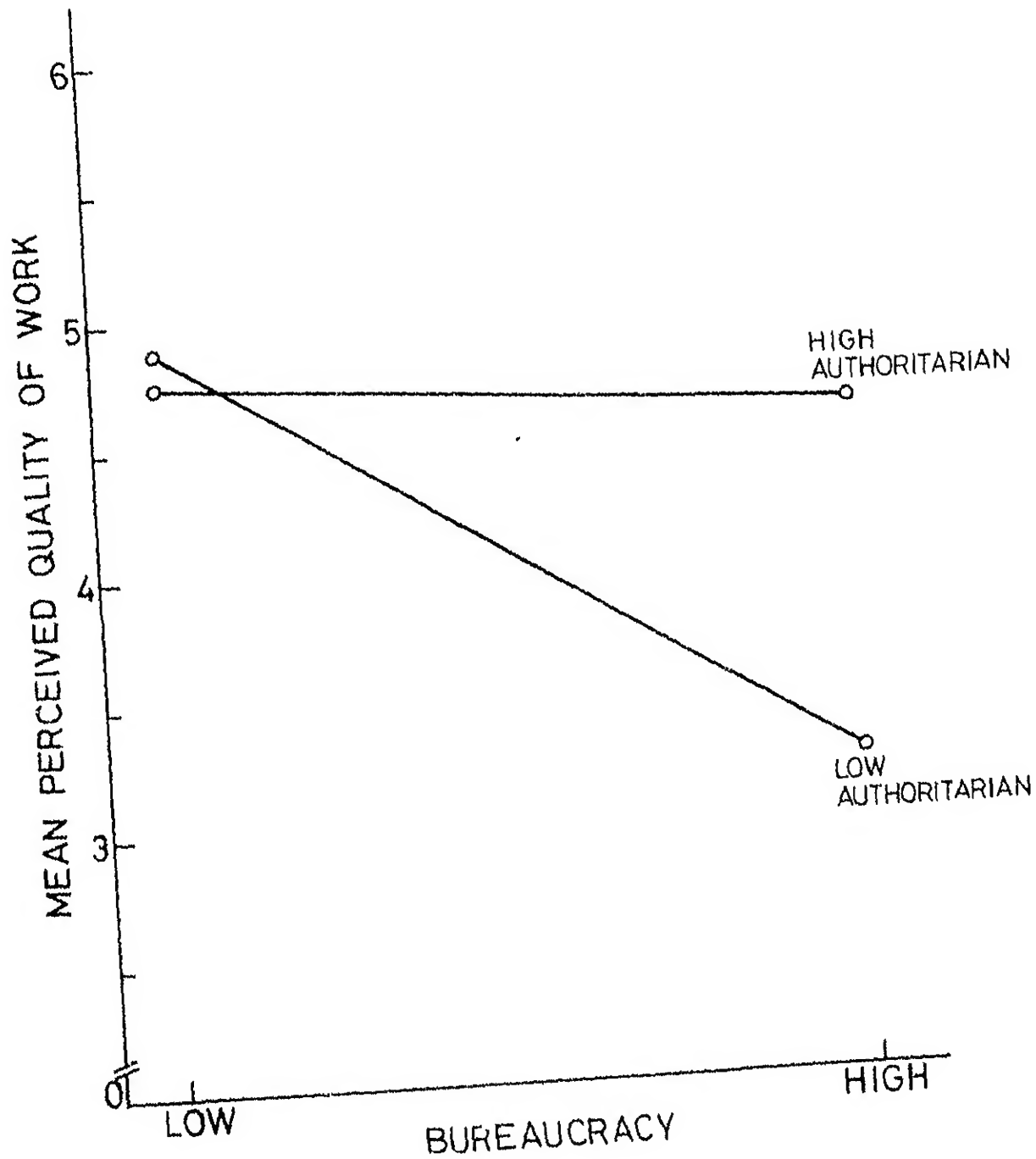


Fig. 6 Quality of work as a function of authoritarianism and bureaucracy.

in low bureaucratic organizations ($M = 5.19$) than subjects of high bureaucratic organizations ($M = 2.31$). Other main effect related to authoritarianism was not found significant.

Alienation:

Table-12 presents the summary of analysis of variance of alienation. It shows that the main effects of both authoritarianism and bureaucracy are significant. Low authoritarian subjects ($M = 4.25$) perceived significantly more alienation than high authoritarian subjects ($M = 3.31$). In high bureaucratic organization ($M = 4.75$) the alienation is perceived significantly more by subjects than subjects of low bureaucratic organization ($M = 2.81$). The two-way interaction did not reach significance level.

DISCUSSION

The predominant finding of the present study suggests that high bureaucratic structure of an organization is not conducive for satisfaction of such needs as security, social, self-esteem, autonomy and self-actualization. With single exception of the results related to item 3 and total score of security need, subjects of low-bureaucratic organizational condition perceived significantly more satisfaction of needs mentioned above than the subjects of high bureaucratic organizational condition. In case of item 3 of security need subjects perceived more satisfaction in high bureaucratic organization than the low bureaucratic organization. This reverse finding of item 3 balanced the effect of item 1, 2 on total score of security need.

The job-satisfaction, perceived quality of work and alienation is also determined by organizational bureaucracy with perceived high quality of work, more job-satisfaction and low alienation in low bureaucratic organization than in high bureaucratic organization.

The effect of subjects' authoritarian disposition on dependent measures are not found to be as strong as of bureaucracy. However, some of the significant findings implicate for the role of authoritarianism in perceived need-satisfaction. In case of security need low authoritarian subjects indicate more perceived satisfaction than high authoritarian subjects. But the satisfaction of self-esteem need was perceived more by high authoritarians

than by low authoritarians. The factor of authoritarianism did not affect the satisfaction of other needs. It seems that high authoritarians due to their insecure disposition perceived the security need satisfaction lesser than the low authoritarians. At the same time, they (high authoritarians) do not like to perceive themselves less prestigious which is reflected by their perceived satisfaction of self-esteem need. In addition, low authoritarians in comparison to high authoritarians were higher in perceived alienation.

The results also provide examples of significant interaction between authoritarianism and bureaucracy. Perceived satisfaction of autonomy need item 3 is jointly determined by bureaucratic structure and subjects' authoritarianism (Figure 4). The finding suggests that low authoritarians in comparison to high authoritarians perceive more autonomy need satisfaction in low bureaucratic organization. On the contrary, high authoritarians in comparison to low authoritarians seem to perceive more satisfaction in high bureaucratic organization. Results clearly imply that high bureaucratic structure seems to be conducive for need satisfaction of high authoritarian persons. A similar trend of interaction is found in case of self-actualization need item 2 also.

Moreover, high and low authoritarians considered high-low bureaucracy differently for the quality of work. Results indicate that high bureaucracy is seen favourable for high quality of work by high authoritarians but not by the low authoritarians (Figure 6).

The results of this experiment once again support the hypothesis that bureaucracy hinders satisfaction of needs. High

bureaucratic organization is perceived negatively in terms of its role in need satisfaction. In addition, the significant interactions of the two factors bureaucracy and authoritarianism further suggest that the degree and nature of dysfunctional aspect of bureaucracy is not universal. Individual's personality characteristics also determine the perception of bureaucracy to some extent. For example, as discussed above high and low authoritarians differed in their perception of bureaucracy for need satisfaction. This suggests that dysfunctional character of bureaucracy is more effective on perception of low authoritarians than on high authoritarians.

General Discussion

The main goal of the present experiments is to show the effects of organizational bureaucracy, size, management level and authoritarianism on perceived need satisfaction. As hypothesized earlier, the findings of the present experiment clearly demonstrate that bureaucratic organizational structure and lower position in organizational hierarchy function negatively in need-satisfaction. Small size organization is perceived to be more conducive for need satisfaction than large size organization. Need satisfaction is partly a function of the individual's authoritarianism. Significant interaction effects further demonstrate that need satisfaction can be appropriately understood when the combined effects of different factors are considered. In both experiments, the findings related to security need are ambiguous. It has been argued that high bureaucracy provides security provided one is ready to follow rules and the set code of conduct. In case one is not sure about his adherence to rules, he may find himself in an insecure situation. Such a situation will cause a feeling of insecurity in high bureaucratic organisations. On the other hand, low bureaucracy may become a source of insecurity due to flexibility in overall functioning of the organization. This contention is further supported by Crozier (1964)

Organizational effectiveness ultimately rests on the question of how successful an organization has been in attaining its stated objectives. Success of an organization partly depends

upon motives and goals satisfaction of individual members of organizations. Most employees have fairly specific notions about what they want from their jobs. Such notions may include receiving a certain salary increase or promotion, having a challenging job, making new friends, and so forth. In fact, the very act of going to work has often been conceptualized in terms of an exchange relationship in which individuals contribute their energies towards organizational goal attainment in exchange for the receipt of certain outcomes from the organization that facilitate goal attainment. In other words, individuals will be inclined to participate in organizational activities only to the extent that they see their rewards (inducement to work) as being commensurate with their efforts (contributions). Thus, personal motives and goals at work become important variables in understanding human behaviour and organizational performance. This theoretical approach has been well described by Steers (1977). From this theoretical perspective the findings of the present study seem to be very significant. This shows deep implications of dysfunctions which are produced by organizational bureaucratic structure. Actually, bureaucracy, in a way, does not only hinder satisfaction of needs, but it's dysfunctional consequences are bound to show their effects on organizational performance. Thus, for both organizational effectiveness and individual's satisfaction, it is important to minimize dysfunctional effects of bureaucracy. The findings support the contention of earlier investigators conducted in real setting (Argyris, 1957; Crozier, 1964; Gouldner, 1954, 1955; Ivancevich,

Szilagyi, Jr., and Wallace, Jr., 1977a, 1977b; Schein and Greiner, 1977) that rigid bureaucratic set-ups should be humanized to provide more satisfaction, autonomy and self-actualization of individuals.

As discussed earlier, the findings implicate the role of management level, organizational size and authoritarianism in need satisfaction of individuals. This clearly indicates that individual need satisfaction is not simplistic and dependent on a particular characteristic of organizational structure. Need satisfaction, therefore, should be understood as a complex phenomena in organizational setting involving structural as well as individual variables.

It is quite likely that some criticisms will be put forward regarding present experiments. First, one can easily doubt external validity of the findings based on laboratory research. Vroom (1968) has rightly argued for the unique advantages of experimental methods in the development of scientific knowledge. The long tradition of laboratory experiments in social psychology make it understandable that social psychologists should seek to understand the behaviour of complex systems of bringing them into the laboratory for examination under controlled conditions. It is possible to create in the laboratory, at least, in their simplest and most elementary forms, the basic properties of organization. It can be argued emphatically that organization and personality variables can be manipulated and varied systematically in experimental studies.

Secondly, one may question the purpose of having two separate experiments instead of one having a design of $2 \times 3 \times 2 \times 2$. In scientific enquiry one research leads to another. In the first experiment, we examined effects of structural variables on need satisfaction. It is realized that the effect of personality variable such as authoritarianism and its interaction with bureaucracy will be highly relevant for our understanding of need satisfaction in organizational setting. Therefore, two separate experiments are reported and linkages in findings are shown.

Thirdly, one can question variation in response measures across two studies. In a way, this has become the strength of this report. Although need fulfilment obviously could be measured in a number of different ways, two dependent measures questionnaires used in the two experiments provide some degree of generality to the findings across two response measures.

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Appendix - A

General Instructions

By all accounts, much of the life of modern man has increasingly come under the domination of large or small organizations. Organizations of all sorts — business, governmental, educational and social have proliferated in our modern era to the point where much of our daily life, one way or another, is spent in organizational activity.

As you approach the completion of your formal academic training, frequently you start thinking about such organizations even if you have not formally joined. Environment, structure, administrative set-up and facilities in different organizations vary.

Here is a description of different organizations which will give you the idea of its structure, size and your possible position in the organizational hierarchy. Please assume that you are the employee of these organizations. Organization has a number of characteristics. At present we are interested mainly in two characteristics of the organization i.e., its structure and size. Our objective is to know your reactions to these characteristics. You will be asked to complete a questionnaire supposing what will be your reaction to them when you are in a particular position in the hierarchy of organization. We urge you to

read the description very carefully and please give your responses keeping all three things, structure, size and your (supposed) position in organizational hierarchy in mind. We will present to you several such organizational descriptions and you will be required to respond for each one.

Please feel free to ask any question for a clear understanding of the instructions.

Appendix - B₁Management Level Description-1

Almost every organization needs managers and administrators to maintain itself. This management is needed at the different levels of organizations and it forms ^ahierarchy of authority. The power, prestige, status, opportunities and amenities vary according to the position in the organizational hierarchy. Generally power, prestige, status, privileges, opportunities and amenities go on decreasing from higher management level of organizational hierarchy to lower level. Thus, managers at the top of the hierarchy are the most privileged people, next, the managers at the middle level and lastly, the managers at the lower level. In this experiment, you will be placed in a particular position on this hierarchy.

Now I would like you to believe that you belong to the top level of management of the organizations to be described.

Please be very particular about your position when you are reading the description of the organization and when you are completing the questionnaire.

Appendix - B₂Management level Description-2

Almost every organization needs managers and administrators to maintain itself. This management is needed at the different levels of organizations and it forms ^a hierarchy of authority. The power, prestige, status, opportunities and amenities vary according to the position in the organizational hierarchy. Generally, power, prestige, status, privileges, opportunities and amenities go on decreasing from higher management level of organizational hierarchy to lower level. Thus, managers at the top of the hierarchy are the most privileged people, next, the managers at the middle level and lastly, the managers at the lower level. In this experiment, you will be placed in a particular position on this hierarchy.

Now I would like you to believe that you belong to the middle level of management of the organizations to be described.

Please be very particular about your position when you are reading the description of the organization and when you are completing the questionnaire.

Appendix - B₃Management Level Description-3

Almost every organization needs managers and administrators to maintain itself. This management is needed at the different levels of organizations and it forms^a hierarchy of authority. The power, prestige, status, opportunities and amenities vary according to the position in the organizational hierarchy. Generally, power, prestige, status, privileges, opportunities and amenities go on decreasing from higher management level of organizational hierarchy to lower level. Thus, managers at the top of the hierarchy are the most privileged people, next, the managers at the middle level and lastly, the managers at the lower level. In this experiment, you will be placed in a particular position on this hierarchy.

Now I would like you to believe that you belong to the lower level of management of the organizations to be described.

Please be very particular about your position when you are reading the description of the organization and when you are completing any questionnaire.

Appendix - C₁Organization Description-1

This organization has a rigid set of rules and norms which is laid down and you are expected to conform to it and to act within the limits of the imposed framework.

The managing director or members of the board or job executives are likely to communicate with employees only through established channels. Overall climate will be of formal type. The organization discourages personal relations and informal relationship and it follows set and rigid procedures for hiring (selecting) and firing (dismissing) employees.

The organization does not consider even exceptional cases of individual merit. The jobs of administrator and technical staff are secure unless they violate specific regulations regarding their job performance. The maintenance of an organizational norms and rules becomes the main criterion of success. Employees are not supposed to deviate from established norms, rules and policies.

A fixed salary scale is followed by the organization and no consideration is made while deciding where on this scale, the new hand is to be placed.

Each employee of the organization (except the top most authority) is directly responsible to someone higher in authority. There is complete hierarchy of authority in the organization. Organization depends much more on the "lines of command".

Size: Interaction network of an organization is always patterned to some extent by the size of the group. By using the criterion of interaction possibilities, one can distinguish organizations as small and large. Each has distinctive characteristics.

Large Size. This organization has around 4000 to 5000 people. The organization is too large to permit the development of all possible pair relationships among members. The managers and administrator will have a large number of people to control and manage but they will not have direct control over all of them.

Appendix - C₂Organization Description-2

In this organization particular norms and rules are recommended, but you are free to depart from it, or modify it according to need. There is a possibility of constant improvement and change to meet the new demands.

The managing director or members of the board or executives communicate personally with employees about official matters. Overall climate would be of informal type. The organization does encourage personal relations and informal relationship.

The procedure for hiring (selecting) and firing (dismissing) employees are flexible. The organization always considers the individual's merit. Administrators and technical staff may be fired for reasons other than job incompetence.

No established policies are followed and it is the need of the hour or the issue in hand which influences the decisions made by the administrators. They have freedom to adopt innovative methods to solve the problem.

Starting salaries and conditions of employment are not fixed but are open to modification depending on the qualifications and experiences etc. of the new hand. Lines of authority and hierarchy are not rigidly laid out in this organization. Members of the organization do enjoy flexibility.

Size: Interaction network of an organization is always patterned to some extent by the size of the group. By using the criterion of interaction possibilities, one can distinguish organizations as small and large. Each has distinctive characteristics.

Large Size This organization has around 4000 to 5000 people. The organization is too large to permit the development of all possible pair relationships among members. The managers and administrators will have a large number of people to control and manage but they will not have direct control over all of them.

Appendix - C₃Organization Description-3

This organization has a rigid set of rules and norms which is laid down and you are expected to conform to it and to act within the limits of the imposed framework.

The managing director or members of the board or job executives are likely to communicate with employees only through established channels. Overall climate will be of formal type. The organization discourages personal relations and informal relationship and it follows set and rigid procedures for hiring (selecting) and firing (dismissing) employees.

The organization does not consider even exceptional cases of individual merit. The jobs of administrator and technical staff are secure unless they violate specific regulations regarding their job performance. The maintenance of an organizational norms and rules becomes the main criterion of success. Employees are not supposed to deviate from established norms, rules and policies.

A fixed salary scale is followed by the organization and no consideration is made while deciding where on this scale, the new hand is to be placed.

Each employee of the organization (except the top most authority) is directly responsible to someone higher in authority. There is complete hierarchy of authority in the organization. Organization depends much more on the "lines of command".

Size - Interaction network of an organized group is always patterned to some extent by the size of the group. By using the criterion of interaction possibilities, one can distinguish organizations as small and large. Each has distinctive characteristics.

Small Size. This organization has around 500 people. In this organization members get opportunity to interact in pair relationship and know each-other individually. The managers or administrators will have very few people to control and influence but they will have direct control on them.

Appendix - C₄Organization Description-4

In this organization particular norms and rules are recommended, but you are free to depart from it, or modify it according to need. There is a possibility of constant improvement and change to meet the new demands.

The managing director or members of the board or executives communicate personally with employees about official matters. Overall climate would be of informal type. The organization does encourage personal relations and informal relationship.

The procedure for hiring (selecting) and firing (dismissing) employees are flexible. The organization always considers the individual's merit. Administrators and technical staff may be fired for reasons other than job incompetence. No established policies are followed and it is the need of the hour or the issue in hand which influences the decisions made by the administrators. They have freedom to adopt innovative methods to solve the problem.

Starting salaries and conditions of employment are not fixed but are open to modification depending on the qualifications and experience etc. of the new hand. Lines of authority and hierarchy are not rigidly laid out in this organization. Members of the organization do enjoy flexibility.

Size: Interaction network of an organized group is always patterned to some extent by the size of the group. By using the criterion of interaction possibilities, one can distinguish organizations as small and large. Each has distinctive characteristics.

Small Size: This organization has around 500 people. In this organization members get opportunity to interact in pair relationship and know each-other individually. The managers or administrator will have very few people to control and influence but they will have direct control on them.

Appendix - D

Response-Questionnaire

Serial No. _____

Expt. Group _____

Following will be listed several characteristics or qualities connected with your management position and organization. For each such characteristic, you will be asked to give three ratings:

(1) The feeling of security in this organization.

- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(2) The opportunity to develop close friendships.

- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(3) The feeling of self-esteem a person gets from being in this organization.

- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(4) The prestige of my management position outside the organization (that is, the regard received from others not in the organization).

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(5) The opportunity to give help to other people.

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(6) The prestige of my management position inside the organization (that is, the regard received from others in the organization).

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(7) The authority connected with my management position.

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

- (8) The opportunity for personal growth and development.
- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (9) The feeling of worthwhile accomplishment in my management position.
- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (10) The opportunity for participation in the setting of goals.
- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (11) The feeling of self-fulfilment a person gets from being in my management position (that is, the feeling of being able to use one's own unique capabilities, realizing one's potentialities).
- (a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)
- (c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(12) The opportunity for participation in the determination of methods and procedures.

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(13) The opportunity for independent thought and action in this organization.

(a) How much is there now?
(minimum) 1 2 3 4 5 6 7 (maximum)

(b) How much should there be?
(minimum) 1 2 3 4 5 6 7 (maximum)

(c) How important is this to me?
(minimum) 1 2 3 4 5 6 7 (maximum)

(14) In such organization I will feel alienated.

Very high Neutral Very low
7 6 5 4 3 2 1

(15) I will have the sense of power in this organization.

Very high Neutral Very low
7 6 5 4 3 2 1

Appendix - E

Post-Experimental Questionnaire

1. What is your perception of the organizational structure?

Highly Bureaucratic		Neutral		Non-Bureaucratic
9	8	7	6	5
				4
				3
				2
				1

2. What is your perception of the size of this organization?

-1 Large

-2 Small

3. Did you follow the instructions?

Completely		Neutral		Not at all
7	6	5	4	3
				2
				1

4. What was your position in the hierarchy of management?

(a) Top management position.

(b) Middle management position.

(c) Lower management position.

Appendix - FF-ScaleDirection

The purpose of this survey/test is to study attitudes and opinion of people towards many problems such as social, religious, educational and war. Listed below are a number of statements concerning those problems. One can agree or disagree with the statements. You read each statement carefully and decide your position on the scale given below. You should write the scale score on the left side of the statement in the margin.

Slightly agree	....	+1	Slightly disagree	....	-1
Agree	....	+2	Disagree	....	-2
Strongly agree	....	+3	Strongly disagree	....	-3

For example, if you are in strong agreement with a statement then please write +3 on the left side (place given) of that statement. If you are in strong disagreement with the statement then write -3 on the left side (place given) of the statement.

Please be sure that you have understood our instructions.

There is nothing right or wrong when you are responding on these items.

- _____ 1. Obedience and respect for authority are the most important virtues children should learn.
- _____ 2. No weakness or difficulty can hold you back if you are honest and sincere.

- _____3. People should give due consideration to new ideas even if those ideas conflict with the Indian way of life.
- _____4. Science has its place, but there are many important things that can never possibly be understood by the human mind.
- _____5. Human nature being what it is, there will always be war and conflict.
- _____6. Every person should have complete faith in some supernatural power whose decisions he obeys without question.
- _____7. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.
- _____8. The findings of science may some day show that many of our most cherished beliefs are wrong.
- _____9. A person who has bad manner, habits, and breeding can hardly expect to be liked and accepted by decent people.
- _____10. Sex crime, such as rape and attacks on children, are signs of mental illness; such people belong in hospitals rather than in prison.
- _____11. Some people are born with an urge to jump from high places.
- _____12. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.
- _____13. An insult to honour should always be punished.
- _____14. You may dislike a person very much, but the chances are that if you get to know him well you will have more respect for him.
- _____15. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
- _____16. To overcome lawlessness and to maintain law and discipline in the country, it is essential for the government to take severe action against rebellious elements.
- _____17. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

- ___18. Sex criminals such as those who rape and attack children, deserve more than mere imprisonment: such criminals ought to be publicly whipped, or worse.
- ___19. People can be divided into two distinct classes, the weak and the strong.
- ___20. There is hardly anything lower than a person who does not feel great love, gratitude, and respect for his parents.
- ___21. Someday it will probably be shown that a astrology can explain a lot of things.
- ___22. In the long run it is better for our country if young people are allowed a great deal of personal freedom and are not strictly disciplined.
- ___23. Nowadays more and more people are prying into matters that should remain personal and private.
- ___24. Wars and social trouble may someday be ended by an earthquake or flood that will destroy the whole world.
- ___25. Most of our social problems would be solved if we could somehow get rid of the immoral, crooked and feeble-minded people.
- ___26. The wild sex life of the old time was tame compared to some of the goings-on in this country, even in places where people might least expect it.
- ___27. If people would not waste time in futile thinking and worked more, everybody would be better off.
- ___28. Most people do not realize how much of our lives are controlled by plots hatched in secret places.
- ___29. Homosexuals are hardly better than criminals and ought to be severely punished.
- ___30. The businessman and the manufacturer are much more important to society than the artist and the professor.
- ___31. If it were not for the rebellious ideas of youth there would be less progress in the world.
- ___32. No sane, normal, decent person could ever think of hurting a close friend or relative.
- ___33. Familiarity breeds contempt.
- ___34. Nobody has ever learnt or achieved anything really important without having encountered any difficulties.

Appendix - G

General Instructions

By all accounts, much of the life of modern man has increasingly come under the domination of ^{different} / organizations. Organizations of all sorts — business, governmental, educational, social — have proliferated in our modern era to the point where much of our daily life, one way or another, is spent in organizational activity.

As you approach the completion of your formal academic training, you start thinking about your future plans. You face the problem of selecting an organization for your possible job.

Frequently, many of us start thinking about such organizations even if we have not formally joined one. Climate, structure, administrative set-up and facilities in different organizations vary. The following is a description of a few characteristics of an organization. We urge you to read this description carefully. As a matter of fact, we would like that you put yourself mentally in this organization and think how you would feel as a member of this organization. After you have read this description carefully, you will be asked to complete a brief questionnaire regarding your reactions.

Appendix - H₁Organization-1

This organization has a rigid set of rules and norms which is laid down and you are expected to conform to it and act within the limits of the imposed framework.

The managing director or members of the board or job executives are likely to communicate with you (and other employees) only through established channels. Overall climate will be of formal type. This organization lacks informal relationship and activities among workers. The organization does discourage personal relations.

The company or firm follows set and rigid procedures for hiring (selecting) and firing (dismissing) workers and applies them without discriminating in all cases. This organization does not consider even exceptional cases of individual merit.

The jobs of administrators and technical staff are secure unless they violate specific regulations regarding their job-performance. This maintenance of an organizational norms and rules becomes the main criterion of success.

Established norms and policies are followed by administrators in making decisions. Employees are not supposed to deviate from established norms, rules and policies.

Each employee of the organization is directly responsible to someone higher in authority. There is complete hierarchy of authority in the organization.

A fixed salary scale is followed by the organization and no consideration is made while deciding where on this scale, the new hand is to be placed.

Appendix - 11₂Organization-2

In this organization a particular norm is recommended, but you are free to depart from it, or modify it.

The managing director or members of the board or executive are likely to communicate personally with you (and other employee) about business matters. Overall climate would be of informal type. This organization has informal relationships and activities among workers. The organization does not discourage personal relations.

The procedure for hiring (selecting) and firing (dismissing) workers are flexible. The organization always considers the individual merit. The individual human aspect is always considered as important. Administrators and technical staff may be fired for reasons other than job-incompetence.

No established policies are followed and it is the need of the hour, or the issue on hand which influences the decisions made by the administrators. They have freedom to adopt innovative methods to solve the problem.

Each employee of the organization is expected to have the overall welfare of the system at heart and no clear lines of authority are laid out.

Starting salaries and conditions of employment are not fixed but are open to modification depending on the qualifications and experience etc. of the new hand.

Appendix - I

Dependent Measure Scale

You have just read the description of an organization. You are requested to respond on the following items to record your reactions:

1. I will have a feeling of being relaxed in this organization.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

2. I will feel comfortable in this organization.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

3. In this organization I will feel secure.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

4. This will be an organization where I would be liked by others.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

5. I feel that I will be accepted by others in this organization.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

6. I feel that there will be opportunity to work with friendly people.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

7. In this organization I feel that my skills will be respected.

Very high		Neutral		Very low
7	6	5	4	3
				2
				1

8. I feel that in an organization like this my accomplishment will be recognized.

Very high Neutral Very low
 7 6 5 4 3 2 1

9. I feel that being in this organization, will give me prestige.

Very high Neutral Very low
 7 6 5 4 3 2 1

10. In an organization like this I will have opportunity for participation in goal-setting and defining the problem to be worked on.

Very high Neutral Very low
 7 6 5 4 3 2 1

11. I feel that in this organization, I can be independent.

Very high Neutral Very low
 7 6 5 4 3 2 1

12. This will be an organization where I will have a lot of opportunity for independent thought and action.

Very high Neutral Very low
 7 6 5 4 3 2 1

13. I feel this organization will provide opportunity for personal growth and development.

Very high Neutral Very low
 7 6 5 4 3 2 1

14. I believe I will get a feeling of self-fulfilment from being in such an organization.

Very high Neutral Very low
 7 6 5 4 3 2 1

15. This organization will be a place where I can be creative and realize my potentialities.

Very high Neutral Very low
 7 6 5 4 3 2 1

16. In this organization quality of work will be

Very high Neutral Very low
 7 6 5 4 3 2 1

17. The organization productivity will be

Very high			Neutral			Very low
7	6	5	4	3	2	1

18. Job-satisfaction will be

Very high			Neutral			Very low
7	6	5	4	3	2	1

19. In such organization I will feel alienated

Very high			Neutral			Very low
7	6	5	4	3	2	1

Appendix - J

Post-Experimental Questionnaire

We would like you to answer the following questions related to the experiment.

1. After reading the description of the organization did you put yourself mentally in such an organization and think how you would feel as a member of this organization.

Extremely Affirmative				Neutral				Extremely Negative
7	6	5	4	3	2	1		

2. Did you follow the instructions of the experimenter.

Very well				Neutral			Not at all
7	6	5	4	3	2	1	

3. I would rate the organization

Extremely Bureaucratic				Neutral			Extremely Unbureaucratic
7	6	5	4	3	2	1	

July, 1978

VITA

Miss Renu Rastogi
Department of Humanities and
Social Sciences
Indian Institute of Technology
Kanpur-208016

Personal Data

DATE OF BIRTH June 15, 1953

PERMANENT ADDRESS 12, Bachelors' Flats, University Campus,
Lucknow University, Lucknow

EDUCATIONAL QUALIFICATION

<u>Examination</u>	<u>Board/ University</u>	<u>Division</u>	<u>Year</u>	<u>% of Marks</u>
A. High School	U.P. Board	I	1969	67.6
B. Intermediate of Arts	U.P. Board	I	1971	67.8
C. B.A.(with Psychology)	Lucknow Uni.	II	1973	57.0
D. M.A.(in Psychology)	Lucknow Uni.	I with 2nd position	1975	64.5
E. Ph.D.	I.I.T. Kanpur	-	1978	Submitted

Research Project Completed at Master's Level

"A Survey of Opinions and Beliefs of Students about International
Relations."

ACADEMIC AWARDS AND SCHOLARSHIP

- A. Junior High School Merit Scholarship
- B. High School Merit Scholarship from U.P. Board
- C. Intermediate Merit Scholarship from U.P. Board
- D. Bersary Scholarship from Lucknow University at B.A. Level
- E. Research Fellowship, Indian Institute of Technology, Kanpur

Publications

1. Intolerance of Ambiguity and Response to Attitude Similarity/Dissimilarity (with J. Pandey) Psychologia, 1978, No. 2.
2. Machiavellianism/Ingratiation. Accepted in Journal of Social Psychology, 1979.
3. Machiavellianism, Competitive/non-competitive Job Interview and Ingratiation Tactics (with J. Pandey), Proceeding of the 65th Indian Science Congress Association, Gujrat University, Ahmedabad, January 3-7, 1978.

RESEARCH INTEREST

Interested in the broad area of Organizational Behaviour and Social Psychology; more specifically in the studies of those social-psychological variables leading to organizational effectiveness.

MEMBERSHIP OF PROFESSIONAL ORGANIZATIONS

- A. Member, Indian Psychological Association
- B. Member, Indian Science Congress Association

Date **SA** 5836-1

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CD 6.72.9

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